SHEET INDEX

CITY OF KIRKLAND, WA CODE COMPLIANCE:

2012 IBC, STANDARDS AND AMENDMENTS, WAC 51-50
2012 IMC, STANDARDS AND AMENDMENTS, WAC 51-52
2012 IFC, STANDARDS AND AMENDMENTS, WAC 51-54
2012 UPC, STANDARDS AND AMENDMENTS, WAC 51-56, 51-57

PROJECT SUMMARY

APPLICANT:
VERIZON WIRELESS
3245 158TH AVE SE, MS231
BELLEVUE, WA 98008

APPLICANT AGENT:
ODELIA PACIFIC CORPORATION
1215 4TH AVENUE, SUITE 1900
SEATTLE, WA 98161
CONTACT: SARAH TELSCHOW
CELL: 206-979-6268
FAX: 206-490-3839
EMAIL: STELSCHOW@ODELIA.COM

LEASING CONSULTANT:
ODELIA PACIFIC CORPORATION
1215 4TH AVENUE, SUITE 1900
SEATTLE, WA 98161
CONTACT: GLENN PRIEST
CELL: 206-251-4563
FAX: 206-490-3839
EMAIL: GPRIEST@ODELIA.COM

DESIGN CONSULTANT:
CAMP & ASSOCIATES INC.
19401 40TH AVE W, SUITE 200
LYNNWOOD, WA 98036
CONTACT: ERIC CAMP
PHONE: 425-740-6392

LEGAL DESCRIPTION:

POR GL 1 & 2 & BLKS F & G OF THE 2ND SUPL PLAT OF LK WN SH LDS TGW 2ND CL SHLDS ADJ ALL LY WLY OF W MGN LK WN BLVD-LESS POR N OF S LN OF N 1076.80 FT SD GL 1 & ITS WLY PROD - LESS FOR THOF S OF LN BEG AT NXN 1902.66 FT S & PLW N LN GL 1 & W MGN LK WN BLVD TH S 03-09-13 E ALG W MGN 75 FT TO TPOB OF DESC LN TH N 88-35-53 W TO INNER HARBOR LN & TERMINUS THIS LN - LESS POR CONV BY REC 8907281497 AKA LOT B KK ALT LL #LL-91-50 REC 9104302101

SITE NAME:	SEA - CARILLON POINT
SITE ADDRESS:	3000 CARILLON POINT KIRKLAND, WA 98033
LAND OWNER:	CARILLON PROPERTIES W BLVD. 3000 CARILLON POINT KIRKLAND, WA 98033
STRUCTURE OWNER:	CARILLON PROPERTIES W BLVD. 3000 CARILLON POINT KIRKLAND, WA 98033
JURISDICTION:	CITY OF KIRKLAND, WA
PARCEL NUMBER:	1725059058
ZONING:	PLA 15A
OCCUPANCY:	USE GROUP B (BUSINESS)
CONSTRUCTION TYPE:	5B

PREVIOUS PERMIT APPROVALS:
ZON09-00001, BLD09-00001

PROJECT DESCRIPTION:

THE SCOPE OF WORK INCLUDES:
UPDATE/REPLACE (6) PANEL ANTENNAS, AND ADD ANCILLARY EQUIPMENT. ONLY (1) HYBRID CABLE SHALL BE USED FROM EQUIPMENT RM TO ROOF TOP DUE TO LIMITED ROOM FOR ROUTING

verizonwireless

SEA - CARILLON POINT

(AWS)
3000 CARILLON POINT
KIRKLAND, WA 98033

LAT: 47° 39' 27.30" N
LONG: 122° 12' 20.00" W
ELEVATION: 50.0 FEET (AMSL)

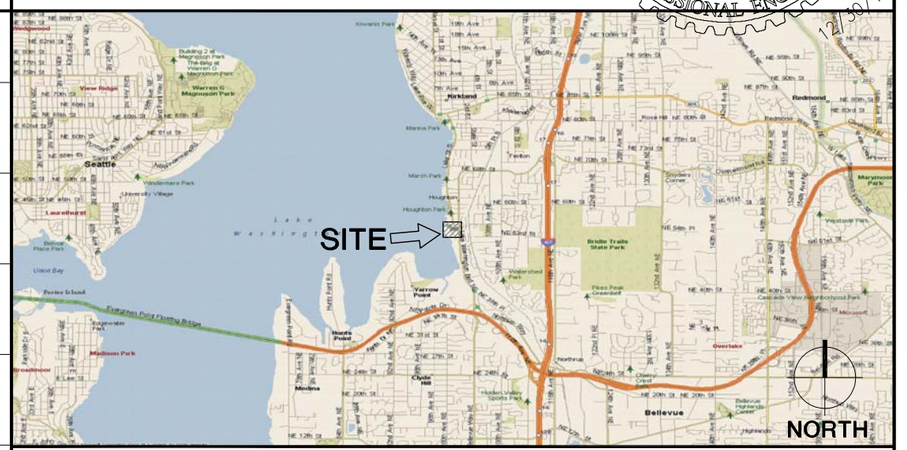
CONFIDENTIAL AND PROPRIETARY
Not for disclosure outside VERIZON WIRELESS without permission.

GLEN L. HUNT III
STATE OF WASHINGTON
40555
REGISTERED
PROFESSIONAL ENGINEER
12/30/13

SIGNATURE BLOCK

TITLE	SIGNATURE	DATE
CONSTRUCTION MANAGER		
RF ENGINEER		
REAL ESTATE		
SITE ACQUISITION		
PROPERTY OWNER		
TOWER OWNER		

AREA MAP



DRIVING DIRECTIONS FROM VERIZON WIRELESS (3245 158TH AVE SE, BELLEVUE WA):
1) DEPART 3245 158TH AVE SE, BELLEVUE, WA 98008 ON 158TH AVE SE (SOUTH-WEST)
2) TURN RIGHT (WEST) ONTO SE EASTGATE WAY 3) TURN LEFT (WEST) ONTO RAMP I-90 W / SEATTLE
4) TAKE RAMP (LEFT) ONTO I-90 (MOUNTAINS TO SOUND GREENWAY-I-90)
5) AT EXIT 10, TURN RIGHT ONTO RAMP I-405 S / I-405 N / BELLEVUE / EVERETT / RENTON / TACOMA
6) TAKE RAMP (RIGHT) ONTO I-405 N / BELLEVUE / EVERETT 7) AT EXIT 14, TURN RIGHT ONTO RAMP WA-520 E / WA-520 W / SEATTLE / REDMOND 8) TAKE RAMP (LEFT) ONTO WA-520 WA-520 W / SEATTLE 9) KEEP RIGHT ONTO RAMP 108TH AVE NE
10) TURN RIGHT (NORTH) ONTO 108TH AVE NE, THEN IMMEDIATELY TURN LEFT (WEST) ONTO NORTHUP WAY
11) BEAR RIGHT ONTO LAKE WASHINGTON BLVD NE 12) TURN LEFT (WEST) ONTO LAKEVIEW DRIVE
13) TURN RIGHT ONTO CARILLON POINT 14) ARRIVE AT 1200 CARILLON POINT, KIRKLAND, WA 98033

verizonwireless

ODELIA PACIFIC CORPORATION

SEA - CARILLON POINT
(AWS)
3000 CARILLON POINT
KIRKLAND, WA 98033

CAMP+ ASSOCIATES
19401 40TH AVE W, SUITE 200
LYNNWOOD, WA 98036
PHONE: (425) 740-6392
FAX: (425) 224-1614
WWW.CAMPASSOC.COM

PROJECT MANAGER: EJC

PREPARED BY: GA

APPROVED BY: EJC

GA	12/27/13	FINAL PERMIT ISSUE
GA	12/20/13	FINAL PERMIT ISSUE
GA	12/19/13	PRELIM PERMIT ISSUE
GA	11/25/13	PRELIM PERMIT ISSUE
GA	11/19/13	PRELIM PERMIT ISSUE
GA	11/15/13	PRELIM PERMIT ISSUE

SHEET NAME
TITLE SHEET

SHEET NUMBER
T1.0

PROJECT NUMBER
20130995344

CONTRACTOR NOTES:

THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

GENERAL NOTES:

DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN.

PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE NEW PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER IN WRITING.

THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/ VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.

THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.

ANTENNA SUPPORTING POLE IS UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION SUB-CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF PERSONNEL AND PROPERTY FROM HAZARDOUS EXPOSURE TO OVERHEAD DANGERS.

GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.

DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.

THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION UPON COMPLETION OF WORK. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

CONTRACTOR SHALL ENSURE THE GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY, PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND NATIONAL CODES, REGULATIONS AND SAFETY REGULATIONS, ALL OSHA REGULATIONS, ALL PUBLIC AND MUNICIPAL AUTHORITIES, AND ANY UTILITY COMPANIES' REGULATIONS AND DIRECTIVES.

THE DRAWINGS AND SPECIFICATIONS ARE A GENERAL DIRECTIVE FOR THE SCOPE OF WORK. EXACT DIMENSIONS AND LOCATIONS MAY CHANGE IN THE FIELD. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS AND LOCATIONS AND REPORT ANY AND ALL DISCREPANCIES TO REPRESENTATIVE. ANY MINOR ERRORS AND OMISSIONS IN THE DRAWINGS AND SPECIFICATIONS DOES NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

CONTRACTOR IS RESPONSIBLE FOR FIELD MEASUREMENTS TO CONFIRM LENGTHS OF CABLE TRAYS AND ELECTRICAL LINES AND ANTENNA MOUNTING.

VERIFICATION THAT EXISTING TOWER/POLE/STRUCTURE CAN SUPPORT THE PROPOSED ANTENNA, COAX & ADDITIONAL EQUIPMENT LOADING IS TO BE DONE BY OTHERS.

GLEN L. HUNT III
STATE OF WASHINGTON
40555
REGISTERED
PROFESSIONAL ENGINEER
12/30/13

METAL NOTES:

PART 1 - GENERAL

1. SECTION INCLUDES:
   STRUCTURAL STEEL FRAMING MEMBERS, BASE PLATES, PLATES, BARS AND GROUTING UNDER BASE PLATES.
2. SUBMITTALS:
   SHOP DRAWINGS: INDICATE SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, OPENINGS, CONNECTIONS, CAMBERS, LOADS, AND WELDED SECTIONS.
3. QUALITY ASSURANCE
   A. FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
   B. PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

PART 2 - PRODUCTS

1. MATERIALS:

A.	STRUCTURAL STEEL MEMBERS:	ASTM A572, GRADE 50
B.	STRUCTURAL TUBING:	ASTM A500, GRADE B
C.	PIPE:	ASTM A53, TYPE E OR S, GRADE B
D.	BOLTS, NUTS, AND WASHERS:	ASTM A325
E.	ANCHOR BOLTS:	ASTM A307
F.	WELDING MATERIALS:	AWS D1.1, TYPE REQUIRED FOR MATERIALS BEING WELDED
G.	GROUT:	NON-SHRINK TYPE, PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7000 psi AT 28 DAYS.
H.	SHOP AND TOUCH-UP PRIMER:	SSPC 15, TYPE 1, RED OXIDE
I.	TOUCH-UP PRIMER FOR GALV. SURFACES:	ZINC RICH TYPE

2. FABRICATION:
   CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS. GRIND EXPOSED WELDS SMOOTH.
3. FINISH:
   A. PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-1 TO SP-10 PROCEDURES.
   B. STRUCTURAL STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.

PART 3 - EXECUTION

1. EXAMINATION AND PREPARATION:
   VERIFY THAT THE FIELD CONDITIONS ARE ACCEPTABLE.
2. ERECTION:
   A. ALLOW FOR ERECTION LOADS. PROVIDE TEMPORARY BRACING TO MAINTAIN FRAMING IN ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRIDGING AND BRACING.
   B. FIELD WELD COMPONENTS INDICATED ON SHOP DRAWINGS.
   C. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
   D. AFTER ERECTION, TOUCH-UP WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED OR GALVANIZED WITH TOUCH-UP PRIMERS AS SPECIFIED UNDER SECTION 05000,-METALS, PART 2 - PRODUCTS, H & I. SURFACES TO BE IN CONTACT WITH CONCRETE NOT INCLUDED.
3. FIELD QUALITY CONTROL:
   FIELD INSPECTION OF MEMBERS, CONNECTIONS, WELDS AND TORQUING.

TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. CERTAIN MATERIALS AND PRODUCTS WILL BE SUPPLIED BY THE OWNER (REFER TO GENERAL CONDITIONS FOR THE LIST OF OWNER FURNISHED EQUIPMENT, MATERIALS AND SUPPLIES FOR THESE ITEMS). THE CONTRACTOR IS RESPONSIBLE FOR PICKUP AND DELIVERY OF ALL SUCH MATERIALS
   C. ALL OTHER MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR.
2. MATERIALS:
   A. COAXIAL CABLE:
      1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURERS' REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      2. ALL COAX RUN LENGTHS GREATER THAN 143 FEET SHALL BE 1-5/8" AND IN LENGTH LESS THAN OR EQUAL TO 143 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      2. SECOND LOCATION IS INSIDE THE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT.
   B. USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.
5. TESTING
   VERIZON WIRELESS SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE CLIMBER / QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE VERIZON WIRELESS A MINIMIM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

ELECTRICAL NOTES:

INSTALLATION OF SECONDARY POWER AND CONNECTION TO METER SHALL BE COMPLETED IN COMPLIANCE WITH NATIONAL ELECTRIC CODE, NFPA 70, AND THE STATE LAWS, RULES AND REGULATIONS FOR INSTALLING ELECTRIC WIRES & EQUIPMENT, ALL LATEST ISSUE, AND WITH SPECIFICATIONS PER A.S.T.M. B 231, B 400, I.C.E.A. S651-401, I.C.E.A. P81-570, & LOCAL PUD.

PROVIDE A METER BASE PER LOCAL UTILITY STANDARDS. MOUNT ON SIDE OF OWNER FURNISHED BACK BOARD.

UNDERGROUND CONDUIT SHALL BE RIGID POLYVINYL CHLORIDE CONDUIT: SCHEDULE 40, TYPE 1, CONFORMING TO UL ARTICLE 651: WESTERN PLASTICS OR CARLON MANUFACTURER. COUPLINGS SHALL BE SLIP-ON, SOLVENT SEALED T PIPE: SOLVENT, WESTERN TYPE COMPATIBLE WITH PVC DUCT. ALL BENDS SHALL BE "WIDE SWEEP" TYPE WITH A 24" MINIMUM RADIUS. ALL CONDUIT UNDER ROADS SHALL BE RGS, (OR PVC ENCASED IN 8"x18" RED CONCRETE DUCTBANK).

CONDUIT USED INDOORS SHALL BE E.M.T., AND RIGID GALVANIZED STEEL FOR OUTDOORS. COUPLINGS SHALL BE RIGID STEEL AND COMPRESSION TYPE FOR E.M.T. SET SCREW FITTINGS ARE NOT PERMITTED. FOR ALL STUBS-UPS, USE RIGID GALVANIZED STEEL CONDUIT.

WIRE AND CABLE SHALL BE OF THE TYPE AND SIZE AS REQUIRED BY NEC. THERE WILL BE NO SPLICES ALLOWED.
PROVIDE HDPE PULLING HAND HOLES AS NEEDED.

CONTRACTOR SHALL PROVIDE TEST OF THE GROUNDING SYSTEM BY CERTIFIED TESTING AGENT. PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. GROUNDING SYSTEM RESISTANCE TO GROUND SHALL NOT EXCEED 5 OHMS. ALL ABOVE GRADE INTERIOR GROUNDING CONNECTORS SHALL BE DOUBLE-LUG COMPRESSION TYPE. ALL BELOW GRADE AND EXPOSED EXTERIOR GROUNDING CONNECTIONS TO PERMANENT EQUIPMENT AND FIXED BUILDING ELEMENTS SHALL BE CADWELD TYPE. CARE SHALL BE TAKEN TO REVIEW CONNECTION LOCATIONS AND MATERIAL TYPES TO AVOID POSSIBLE GALVANIC CORROSION. ALL EXPOSED GROUNDING CONNECTIONS TO BE COATED WITH ANTI-CORROSIVE AGENT SUCH AS "NO-OXY", "NOAOLX" OR "PENETROX". VERIFY PRODUCT WITH PROJECT MANAGER. ALL BOLTS, WASHERS AND NUTS USED ON GROUNDING CONNECTIONS SHALL BE STAINLESS STEEL.

ALL EXTERIOR GROUND BARS SHALL BE COATED WITH ANTI-CORROSIVE AGENT SUCH AS LPS-3 OR AS PER NOTE 6 ABOVE.

ALL JUNCTION AND OUTLET BOXES TO BE LABELED WITH KROY TAPE, OR EQUAL, DESIGNATING ALL CIRCUIT NUMBERS CONTAINED IN EACH BOX.

CONTRACTOR TO ENSURE ILC PROVIDED WITH (2) INTERNAL TVSS.

CONTRACTOR SHALL COORDINATE WITH SITE SURVEY TO LOCATE EXISTING UNDERGROUND UTILITIES. WHEREVER POTENTIAL CONFLICTS/ INTERFERENCES EXIST, HAND EXCAVATE TO AVOID DAMAGE. CONTACT ALL UTILITIES TO LOCATE UNDERGROUND PIPING IN PUBLIC ROW.

VERIFY THAT A.I.C. OF THE UTILITY DOES NOT EXCEED THE A.I.C. RATING OF THE PROVIDED EQUIPMENT SHELTER PACKAGE. IF OVER 10KAIC, PROVIDE FUSIBLE SERVICE ENTRANCE SWITCH AND CONFIRM LOWERING OF AIC TO ACCEPTABLE LEVELS.

UTILITY POINTS OF SERVICE AND WORK / MATERIALS SHOWN ARE BASED UPON PRELIMINARY INFORMATION PROVIDED BY THE UTILITY COMPANIES AND ARE FOR BID PURPOSES ONLY.

CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK / MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL ROPES, CABLES, PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACKFILL, PAY ALL UTILITY COMPANY FEES AND INCLUDE ALL REQUIREMENTS IN SCOPE OF WORK.

GROUNDING NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION SPECIFICATIONS AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
5. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING TWO (2) HIGH PRESS CRIMPS.
6. ALL EXOTHERMIC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.
7. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
8. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG TIN PLATED COPPER UNLESS OTHERWISE INDICATED.
9. GROUND RODS SHALL BE STAINLESS STEEL OR COPPER CLAD STEEL, 5/8"ϕ 10-FT. LONG (OR NOTED OTHERWISE ON PLANS), AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 18" BELOW FINAL GRADE OR 6" BELOW FROST LINE FOR MAXIMUM DEPTH.
10. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
11. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
12. GROUND RING SHALL BE LOCATED A MINIMUM OF 24" BELOW GRADE OR 6" MINIMUM BELOW THE FROST LINE.
13. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE PAD, SPREAD FOOTING, OR FENCE.
14. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
15. OBSERVE N.E.C. AND LOCAL UTILITY REQUIREMENTS FOR ELECTRICAL SERVICE GROUNDING
16. GROUNDING ATTACHMENT TO TOWER SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS OR AT GROUNDING POINTS PROVIDED (2 MINIMUM)
17. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS.
18. CONTRACTOR TO VERIFY CURRENT GROUNDING STANDARDS PRIOR TO CONSTRUCTION.

1 GENERAL NOTES
-

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ODELIA PACIFIC CORPORATION

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PROJECT MANAGER: EJC
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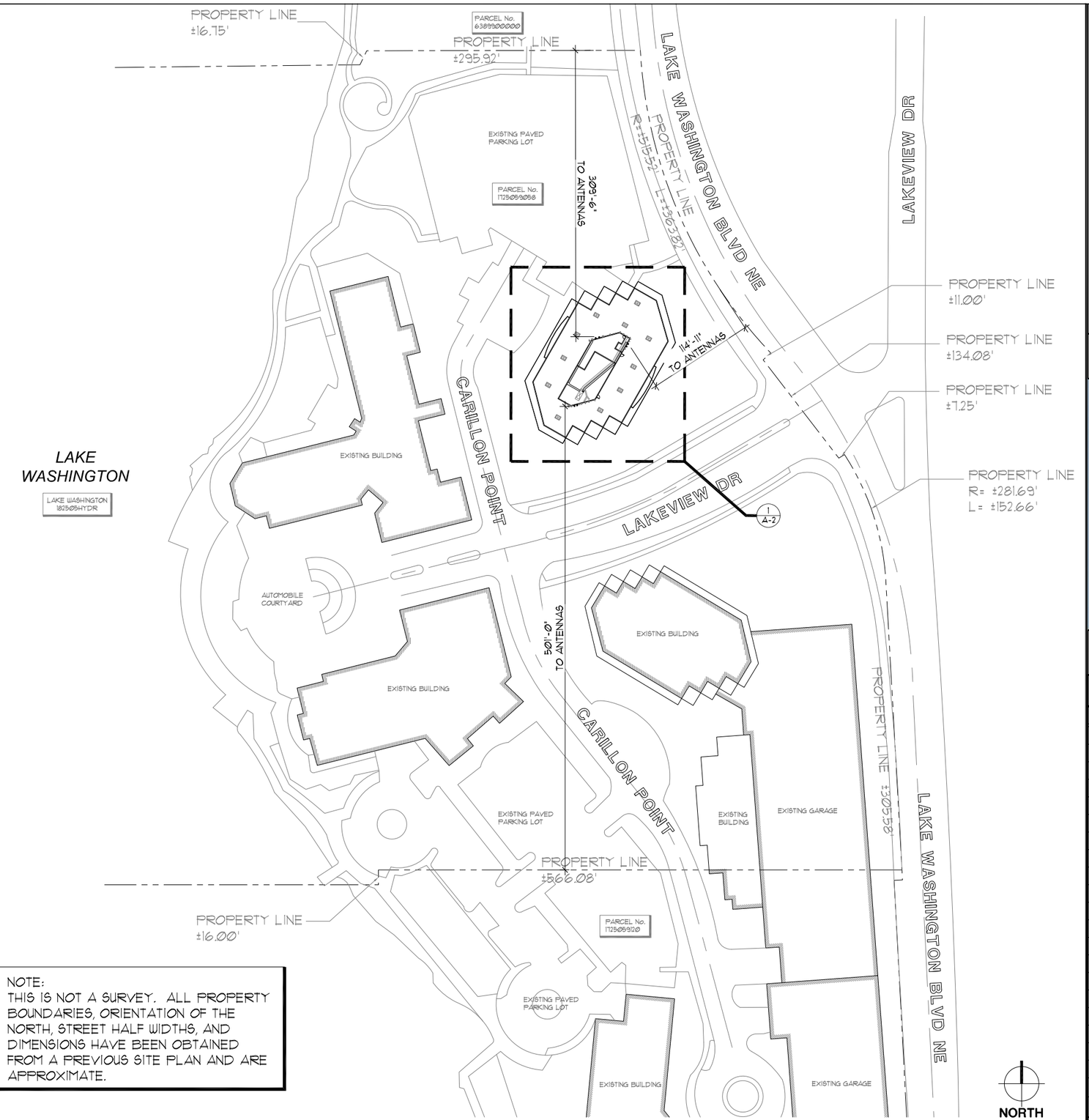
	GA	11/19/13	PRELIM PERMIT ISSUE
	GA	11/15/13	PRELIM PERMIT ISSUE

SHEET NAME
GENERAL NOTES

SHEET NUMBER
SP-1

PROJECT NUMBER
20130995344



NOTE:
THIS IS NOT A SURVEY. ALL PROPERTY BOUNDARIES, ORIENTATION OF THE NORTH, STREET HALF WIDTHS, AND DIMENSIONS HAVE BEEN OBTAINED FROM A PREVIOUS SITE PLAN AND ARE APPROXIMATE.

1 OVERALL SITE PLAN

SCALE: 1"=60'-0" (22"x34") 1"=120'-0" (11"x17")

GLEN L. HUNT III
STATE OF WASHINGTON
40555
REGISTERED
PROFESSIONAL ENGINEER

12/30/13

FOR GL 1 & 2 & BLKS F & G OF THE 2ND SUPL PLAT OF LK WN SH LDS TGW 2ND CL SHLDS ADJ ALL LY WLY OF W MGN LK WN BLVD-LESS FOR N OF S LN OF N 1076.80 FT SD GL 1 & ITS WLY PROD - LESS FOR THOF S OF LN BEG AT NXN 1901.66 FT S & PLW N LN GL 1 & W MGN LK WN BLVD TH S 03-09-13 E ALG W MGN 75 FT TO TPOB OF DESC LN TH N 88-35-53 W TO INNER HARBOR LN & TERMINUS THIS LN - LESS FOR CONV BY REC 8907281497 AKA LOT B KK ALT LL #LL-91-50 REC 9104302101

4 LEGAL DESCRIPTION

SCALE: NO SCALE

3 VICINITY MAP

SCALE: NO SCALE

EXISTING		NEW
—SAS—	SANITARY SEWER	—SAS—
—STS—	STORM SEWER	—STS—
—W—	WATER MAIN	—W—
RIM INV	SANITARY MANHOLE ELEVATIONS	RIM INV
RIM INV	STORM STRUCTURE ELEVATIONS	RIM INV
	PROPERTY LINE & R.O.W.	
	SURFACE DRAINAGE	
	LIGHT STANDARD	
	STREET LIGHT	
672.75	SPOT ELEVATION	672.75
672	CONTOUR	672
—G—G—	GAS MAIN	—G—G—
	MANHOLE	
	CATCH BASIN	
	FIRE HYDRANT	
	EASEMENT LINE	
	FENCE	
—UE/UT—	BURIED UTILITY LINE	—UE/UT—
	UTILITY POLE	
—OE/OT—	OVERHEAD UTILITY LINE	—OE/OT—
	BUILDING	

2 LEGEND

SCALE: NO SCALE

verizon wireless

ODELIA PACIFIC CORPORATION

SEA - CARILLON POINT

(AWS)

3000 CARILLON POINT
KIRKLAND, WA 98033

CAMP+ ASSOCIATES

19401 40TH AVE W, SUITE 200
LYNNWOOD, WA 98036
PHONE: (425) 740-6392
FAX: (425) 224-1614
WWW.CAMPASSOC.COM

PROJECT MANAGER: EJC

PREPARED BY: GA

APPROVED BY: EJC

GA	12/27/13	FINAL PERMIT ISSUE
GA	12/20/13	FINAL PERMIT ISSUE
GA	12/19/13	PRELIM PERMIT ISSUE
GA	11/25/13	PRELIM PERMIT ISSUE
GA	11/19/13	PRELIM PERMIT ISSUE
GA	11/15/13	PRELIM PERMIT ISSUE

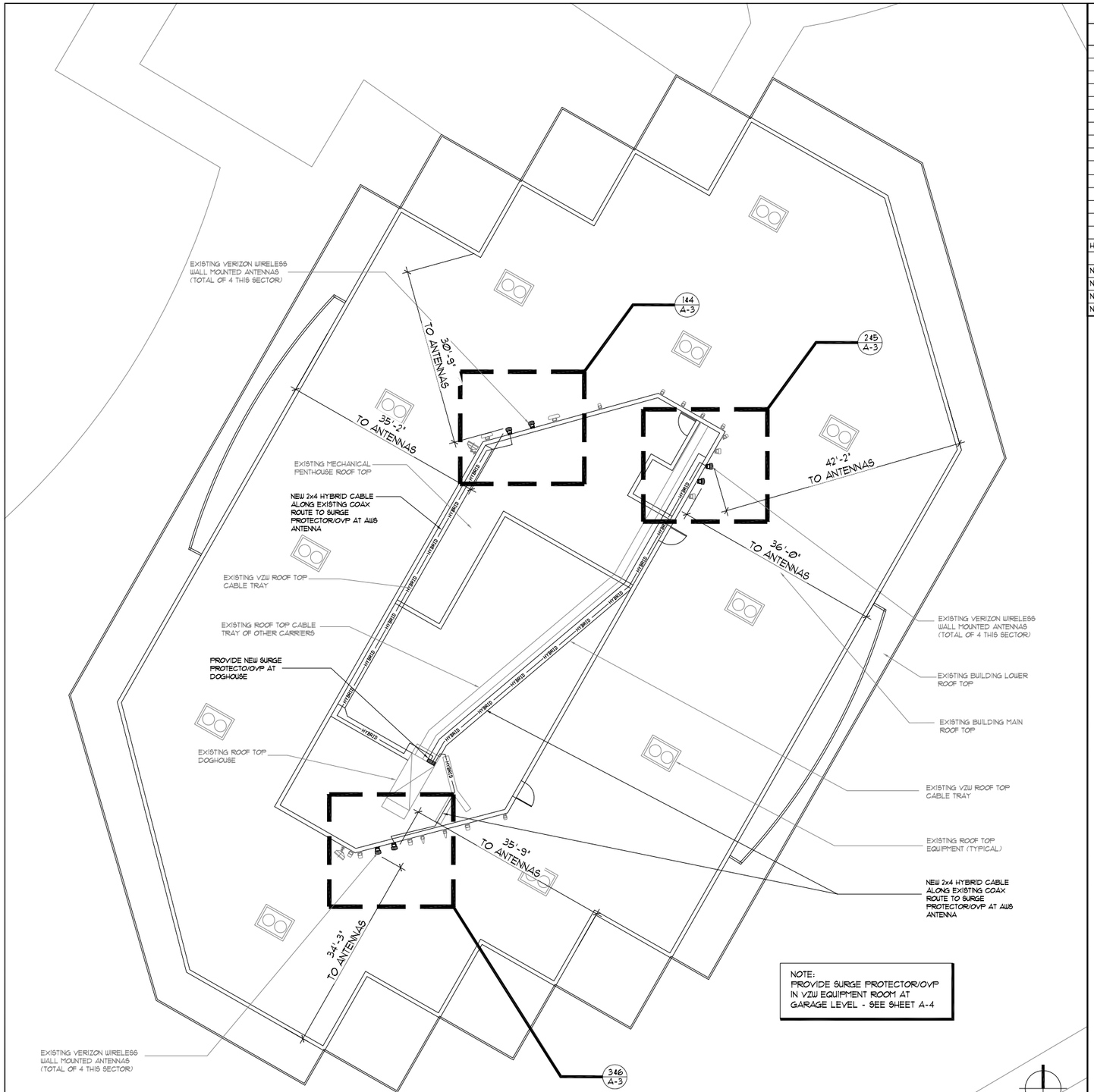
SHEET NAME

OVERALL SITE PLAN

SHEET NUMBER

A-1

PROJECT NUMBER
20130995344



1 **ENLARGED SITE PLAN**

SCALE: 1" = 10'-0" (22x34), 1" = 20'-0" (11x17)

ANTENNA / COAX SCHEDULE

SECTOR	ANTENNA QUANTITY	ANTENNA TIP HEIGHT	ANTENNA SIZE	AZIMUTH	DOWNTILT	NUMBER OF CABLE RUNS	COAX SIZE	COAX LENGTH
ALPHA	1 EXISTING (850)	97'-0"	4'-0"	345°	0	2 EXISTING	1 5/8"	±195'
ALPHA	1 NEW (PCS)	97'-0"	4'-3"	345°	0	DIPLEXED W/ 850	--	--
ALPHA	1 NEW (AWS)	97'-0"	4'-3"	345°	0	--	--	--
ALPHA	1 EXISTING (700)	97'-0"	4'-0"	345°	5	2 EXISTING	1 5/8"	±195'
BETA	1 EXISTING (850)	97'-0"	4'-0"	90°	0	2 EXISTING	1 5/8"	±195'
BETA	1 NEW (PCS)	97'-0"	4'-3"	90°	0	DIPLEXED W/ 850	--	--
BETA	1 NEW (AWS)	97'-0"	4'-3"	90°	0	--	--	--
BETA	1 EXISTING (700)	97'-0"	4'-0"	90°	0	2 EXISTING	1 5/8"	±195'
GAMMA	1 EXISTING (850)	97'-0"	4'-0"	170°	0	2 EXISTING	1 5/8"	±195'
GAMMA	1 NEW (PCS)	97'-0"	4'-3"	170°	0	DIPLEXED W/ 850	--	--
GAMMA	1 NEW (AWS)	97'-0"	4'-3"	170°	0	--	--	--
GAMMA	1 EXISTING (700)	97'-0"	4'-0"	170°	0	2 EXISTING	1 5/8"	±195'
HYBRID CABLE	N/A	N/A	N/A	N/A	N/A	1 NEW	6x12	±195'

NOTE: PROVIDE (1) NEW 6x12 HYBRID CABLE RUN FROM SURGE PROTECTOR/OVP AT EQUIPMENT RM TO SURGE PROTECTOR/OVP @ ROOF

NOTE: PROVIDE (3) NEW 2x4 HYBRID CABLES FROM SURGE PROTECTOR AT ROOF TOP DOGHOUSE TO SURGE PROTECTOR/OVP'S AT ANTENNAS

NOTE: PROVIDE (1) NEW SURGE PROTECTOR/OVP AT EACH SECTOR FOR A TOTAL OF 3)

NOTE: PROVIDE (2) NEW RRU AT EACH SECTOR FOR AWS & PCS ANTENNAS

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12/30/13

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	GA	11/19/13	PRELIM PERMIT ISSUE
	GA	11/15/13	PRELIM PERMIT ISSUE

SHEET NAME
ENLARGED SITE PLAN AND ANTENNA SCHEDULE

SHEET NUMBER
A-2

PROJECT NUMBER
20130995344

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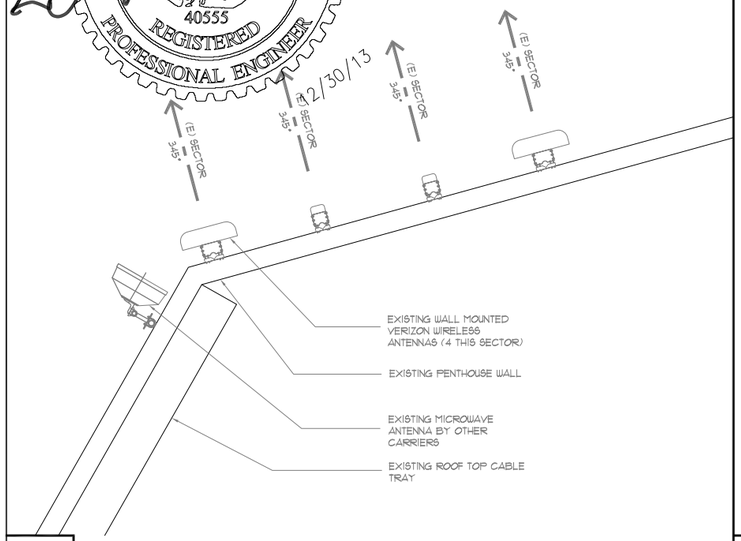
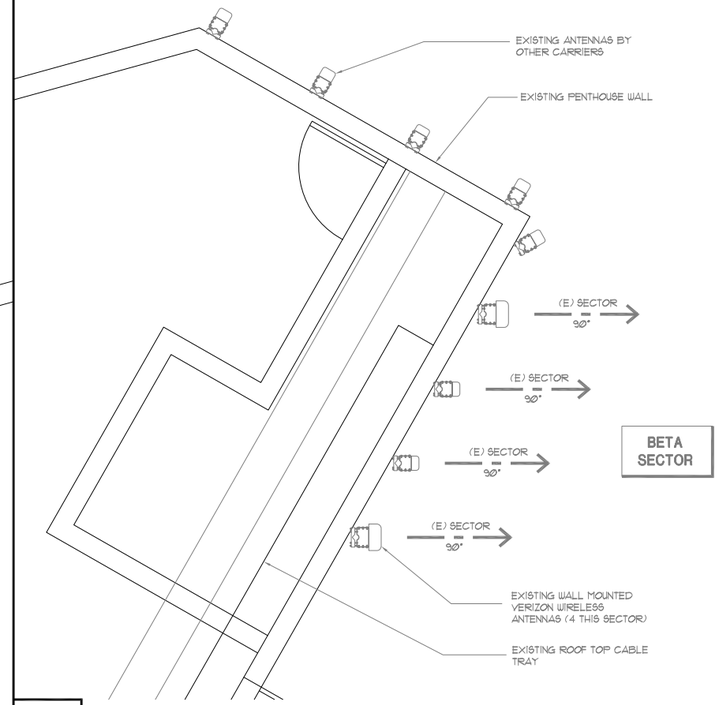
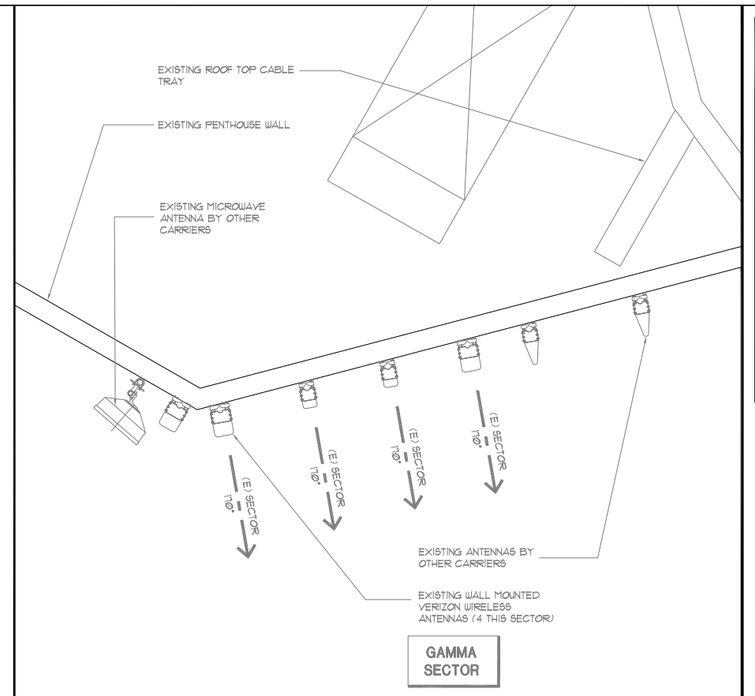


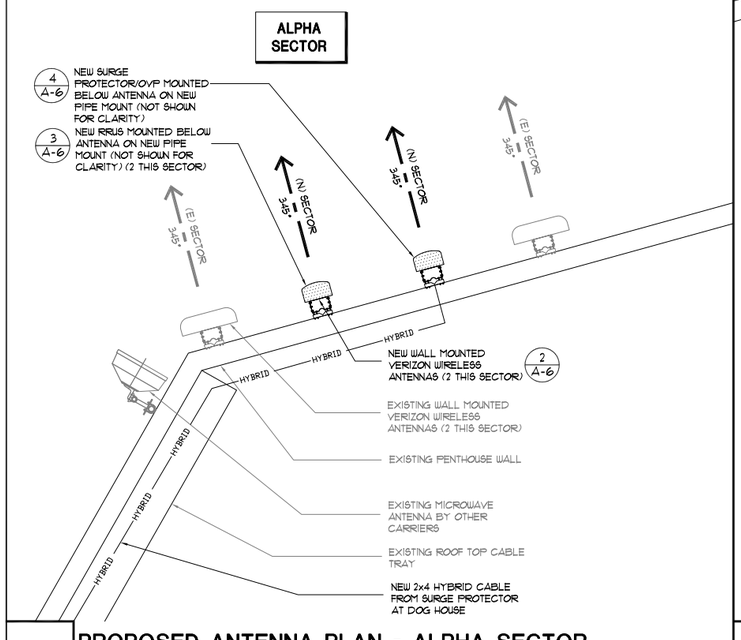
1 **EXISTING ANTENNA PLAN - ALPHA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)



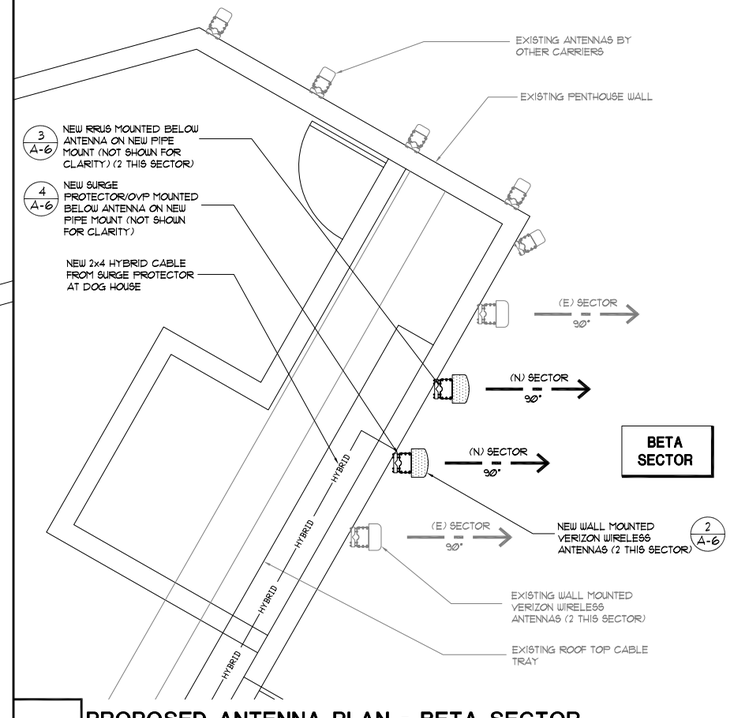
2 **EXISTING ANTENNA PLAN - BETA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)



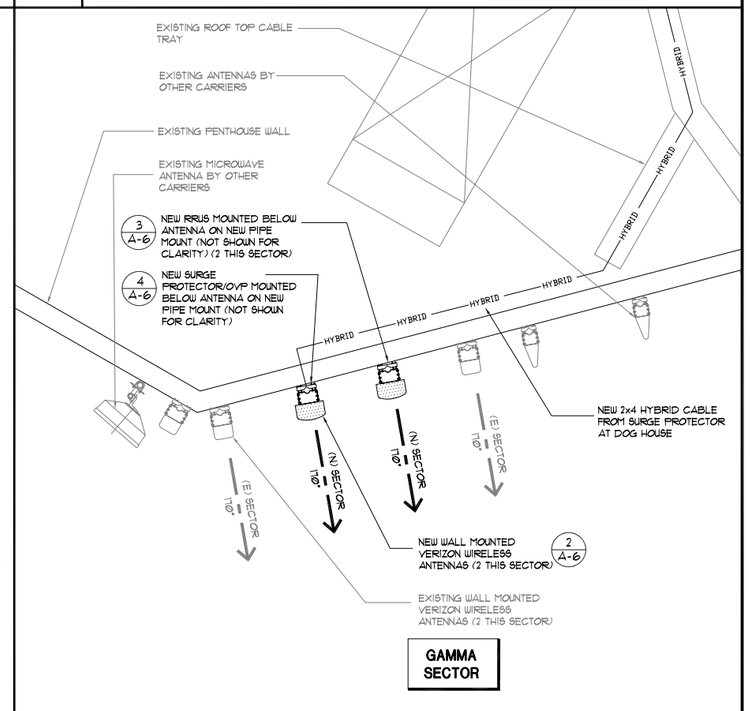
3 **EXISTING ANTENNA PLAN - GAMMA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)



4 **PROPOSED ANTENNA PLAN - ALPHA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)



5 **PROPOSED ANTENNA PLAN - BETA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)



6 **PROPOSED ANTENNA PLAN - GAMMA SECTOR**
SCALE: 3/8" = 1'-0" (22x34), 3/16" = 1'-0" (11x17)

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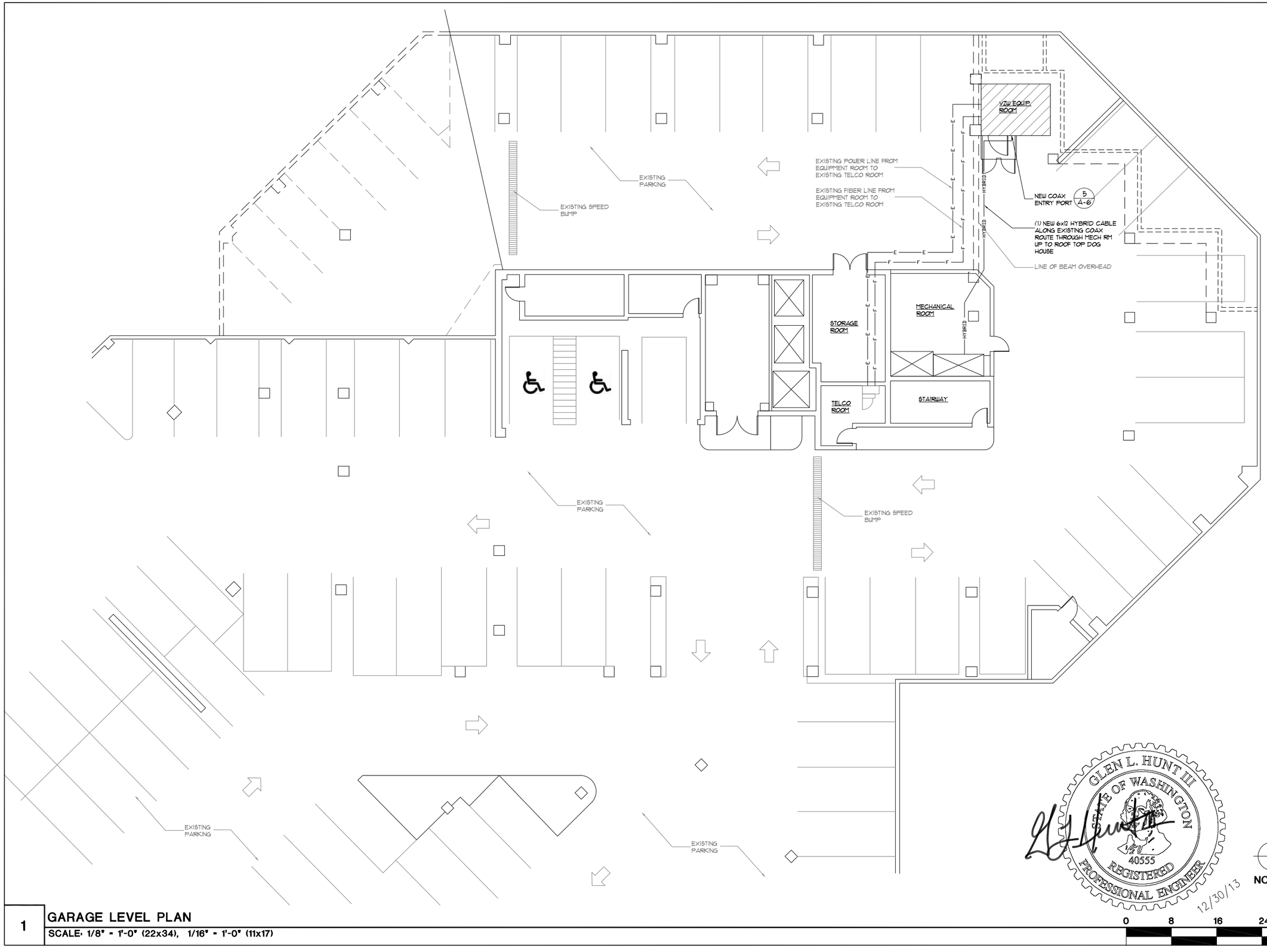
GA	11/15/13	PRELIM PERMIT ISSUE

SHEET NAME
ANTENNA LAYOUT PLANS

SHEET NUMBER
A-3

PROJECT NUMBER
20130995344



1 GARAGE LEVEL PLAN

SCALE: 1/8" = 1'-0" (22x34), 1/16" = 1'-0" (11x17)

0 8 16 24 32

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GA	11/15/13	PRELIM PERMIT ISSUE

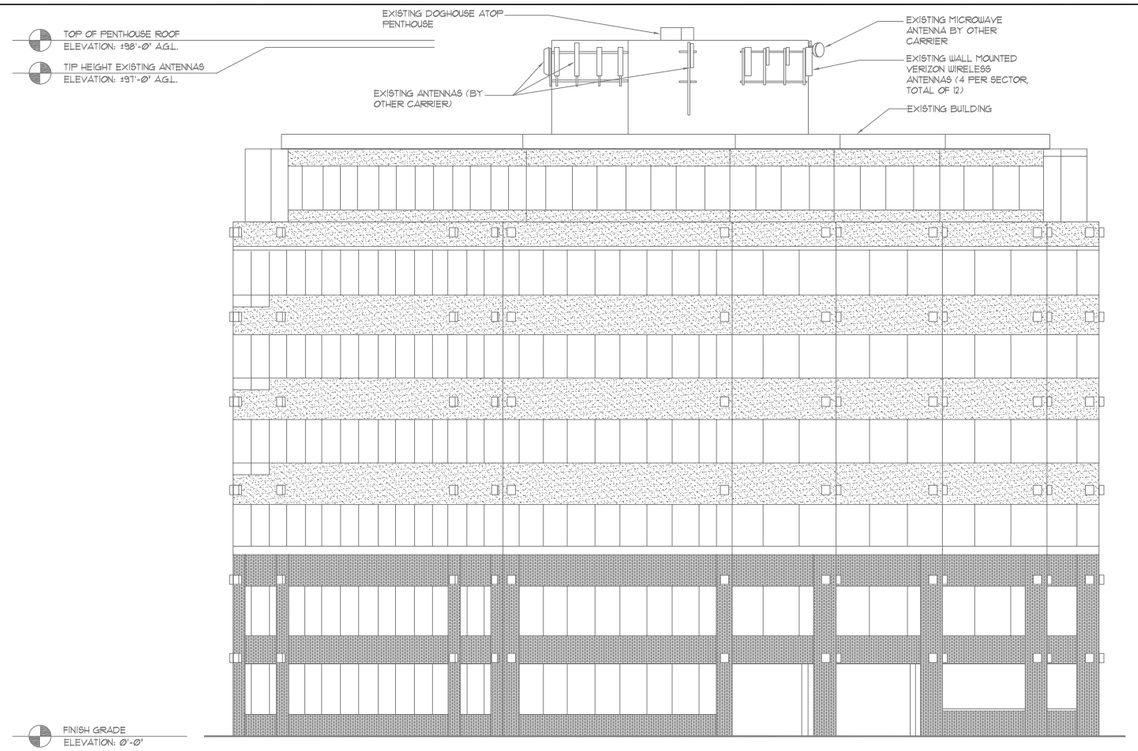
SHEET NAME

GARAGE LEVEL PLAN

SHEET NUMBER

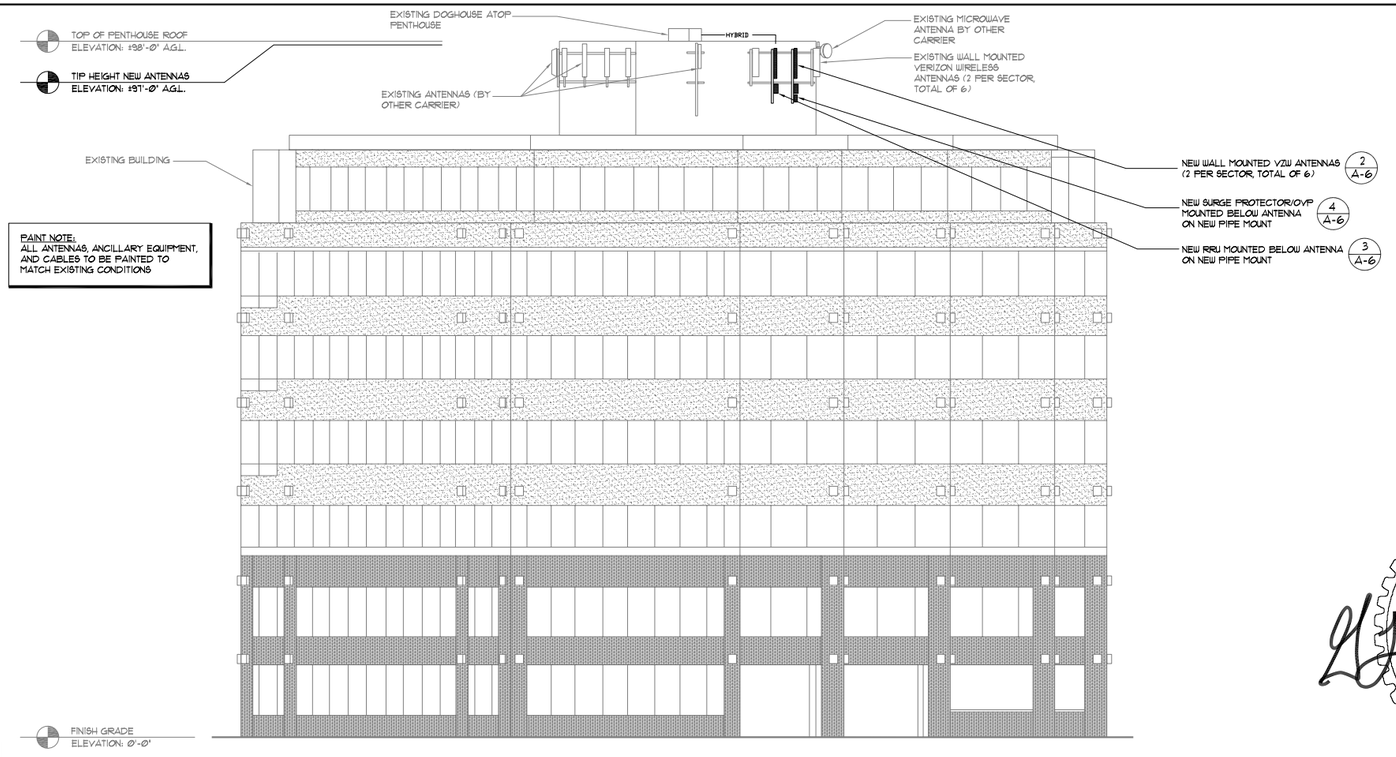
A-4

PROJECT NUMBER
20130995344



2 EXISTING NORTHEAST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")



1 PROPOSED NORTHEAST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")

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12/30/13

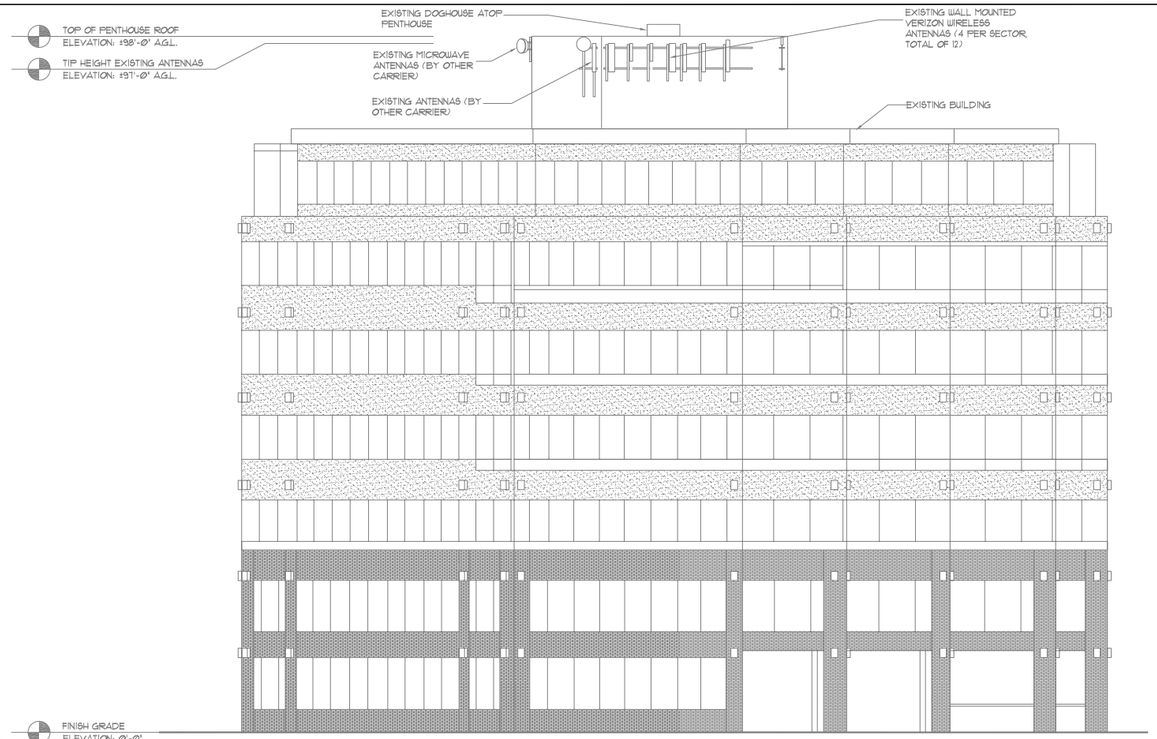
SHEET NAME

ELEVATIONS

SHEET NUMBER

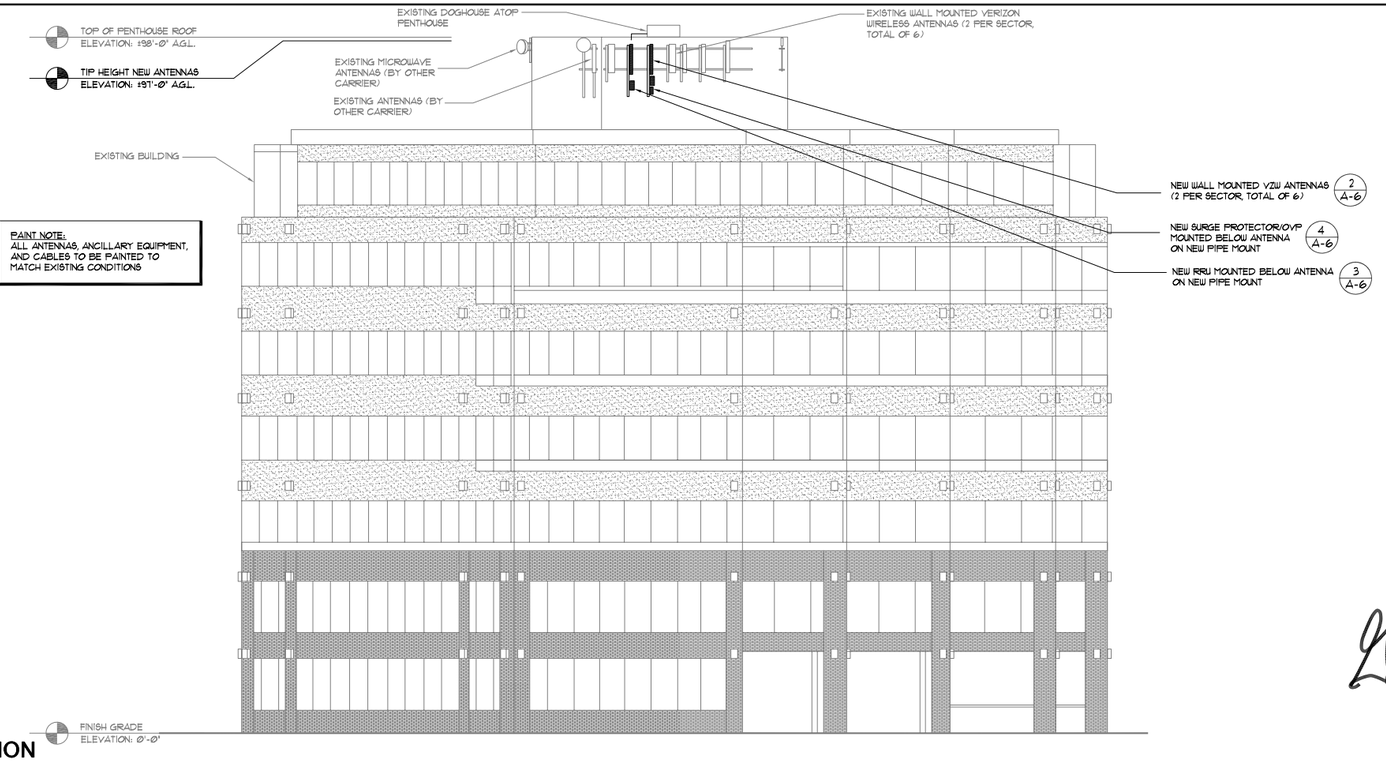
A-5.1

PROJECT NUMBER
20130995344



2 EXISTING SOUTHWEST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")



1 PROPOSED SOUTHWEST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")

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GA	11/15/13	PRELIM PERMIT ISSUE

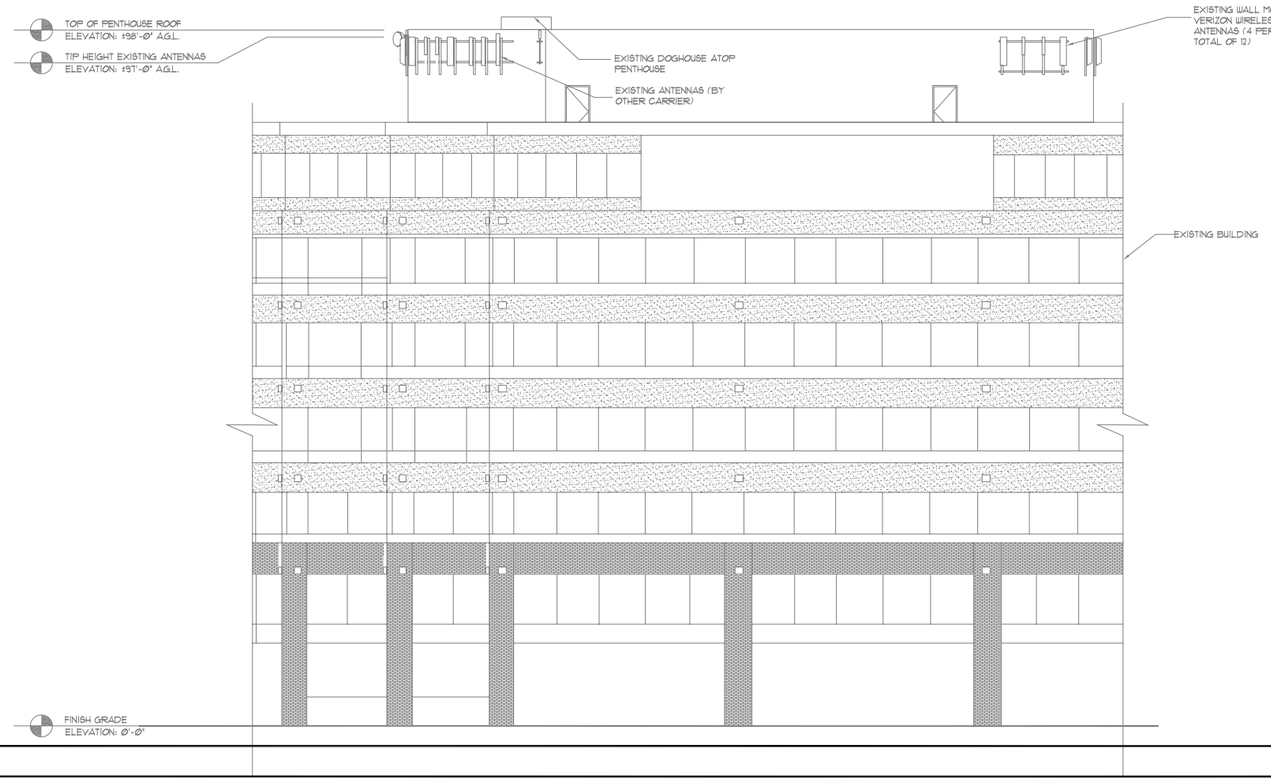
SHEET NAME

ELEVATIONS

SHEET NUMBER

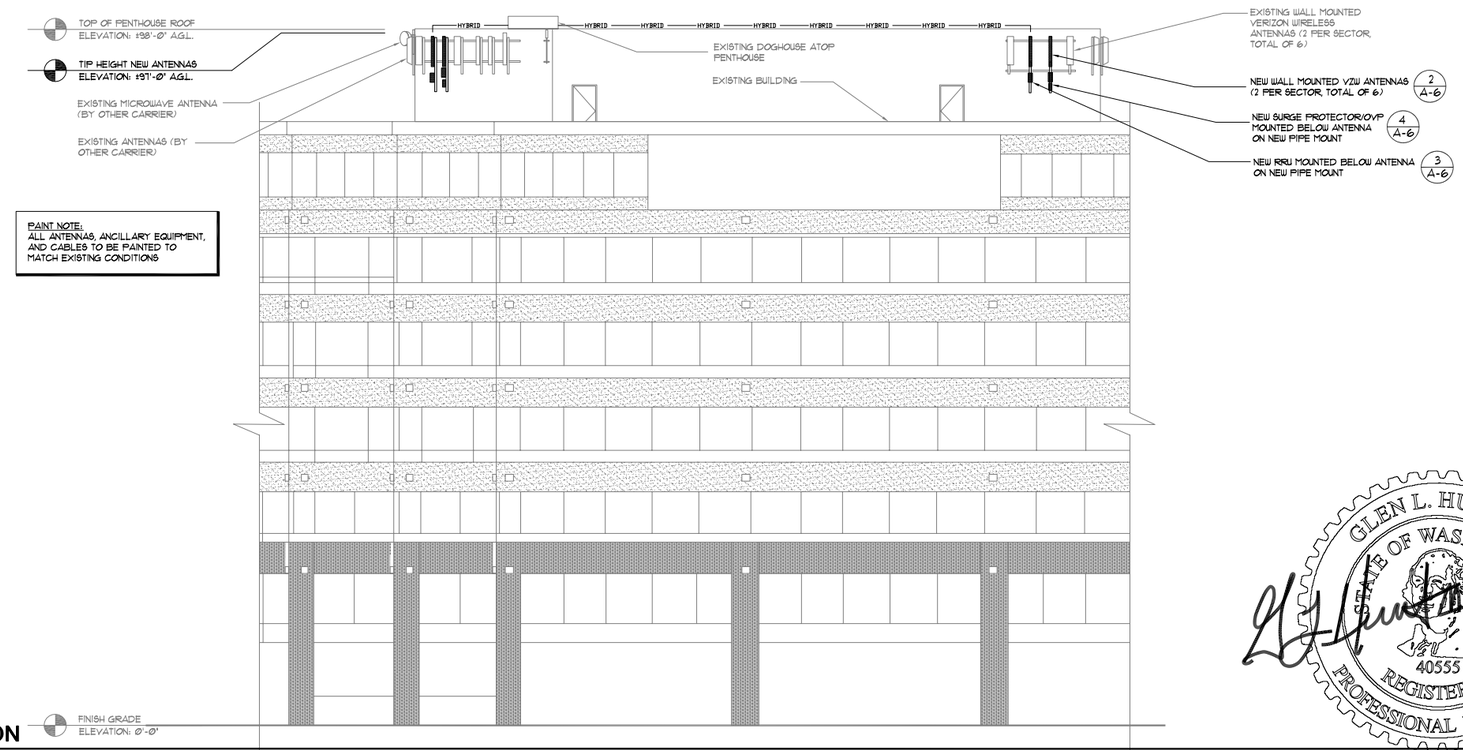
A-5.2

PROJECT NUMBER
20130995344



2 EXISTING PARTIAL SOUTHEAST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")



PAINT NOTE:
ALL ANTENNAS, ANCILLARY EQUIPMENT, AND CABLES TO BE PAINTED TO MATCH EXISTING CONDITIONS

1 PROPOSED PARTIAL SOUTHEAST ELEVATION

SCALE: 3/32"=1'-0" (22"x34") 3/64"=1'-0" (11"x17")

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	GA	11/15/13	PRELIM PERMIT ISSUE

SHEET NAME

ELEVATIONS

SHEET NUMBER

A-5.3

PROJECT NUMBER
20130995344

GENERAL NOTES:

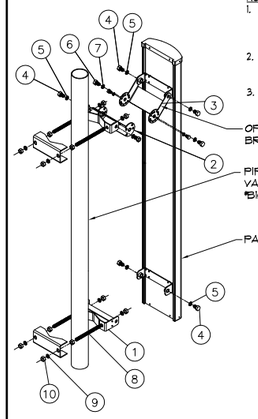
1. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND NATIONAL CODES, REGULATIONS AND SAFETY REGULATIONS, ALL OSHA REGULATIONS, ALL PUBLIC AND MUNICIPAL AUTHORITIES, AND ANY UTILITY COMPANIES' REGULATIONS AND DIRECTIVES.

2. THE DRAWINGS AND SPECIFICATIONS ARE A GENERAL DIRECTIVE FOR THE SCOPE OF WORK. EXACT DIMENSIONS AND LOCATIONS MAY CHANGE IN THE FIELD. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS AND LOCATIONS AND REPORT ANY AND ALL DISCREPANCIES TO REPRESENTATIVE. ANY MINOR ERRORS AND OMISSIONS IN THE DRAWINGS AND SPECIFICATIONS DOES NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

3. CONTRACTOR IS RESPONSIBLE FOR FIELD MEASUREMENTS TO CONFIRM LENGTHS OF CABLE TRAYS AND ELECTRICAL LINES AND ANTENNA MOUNTING.

4. VERIFICATION THAT EXISTING TOWER/POLE CAN SUPPORT THE PROPOSED ANTENNA, COAX & ADDITIONAL EQUIPMENT LOADING IS TO BE DONE BY OTHERS.

1 GENERAL NOTES



NOTES:
1. INSERT SCISSOR BRACKETS BETWEEN THE UPPER ANTENNA MOUNTING BRACKET AND THE UPPER POLE ADAPTER BRACKET. SECURE USING 1/2 INCH HARDWARE PROVIDED.
2. TO SET THE DEGREE OF DOWNTILT, ALIGN THE DESIRED HOLES ON THE SCISSOR BRACKETS AND SECURE USING 5/16 INCH HARDWARE PROVIDED.
3. THE NUMBER OF CONNECTORS WILL VARY BASED ON ANTENNA TYPE.

OPTIONAL DOWNTILT BRACKET

PIPE MOUNT (TYP) VALMONT MICROFLECT PART #B1001 OR APPROVED EQUAL

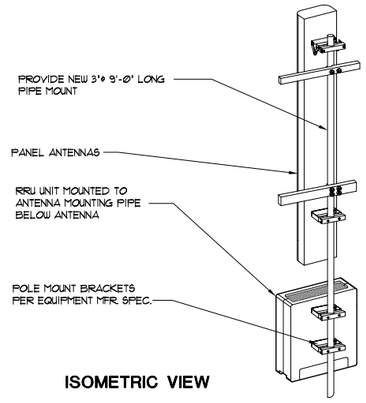
PANEL ANTENNA (TYP)

PARTS:

ITEM	QTY	DESCRIPTION
①	1	ADAPTER, POLE, LOWER
②	1	BRACKET, DOWNTILT, POLE
③	1	BRACKET, DOWNTILT, ANTENNA
④	6	1/2 X 1 HEX HEAD BOLT
⑤	6	1/2 SPLIT WASHER
⑥	2	5/16 X 1 HEX HEAD BOLT
⑦	2	5/16 SPLIT WASHER
⑧	4	1/2" THREADED ROD
⑨	8	1/2" SPLIT WASHER
⑩	12	1/2" NUT

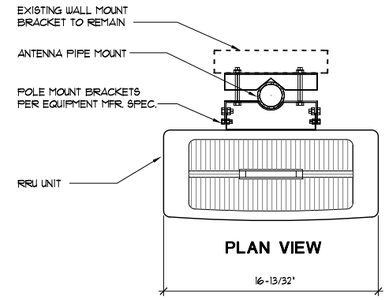
2 ANTENNA MOUNTING HARDWARE

NOT TO SCALE

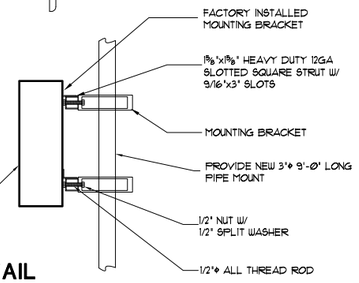


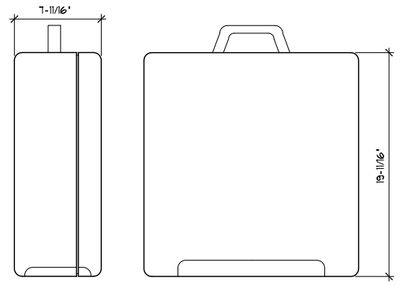
ISOMETRIC VIEW

RRU NOTE:
1. RRU MOUNTED NEAR ANTENNAS.
2. CONTRACTOR TO VERIFY WITH MANUFACTURER SPEC's FOR MOUNTING DETAILS.
3. RRU DETAIL AS SHOWN AS A REFERENCE AND IS SUBJECT TO CHANGE.
4. PLATFORM SHOWN AS TYPICAL. VERIFY ACTUAL CONDITIONS IN FIELD.



PLAN VIEW

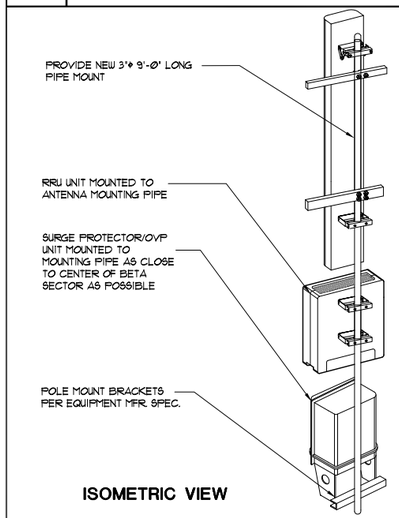




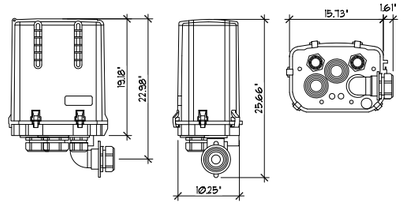
SIDE FRONT

3 RRU MOUNTING DETAIL

NOT TO SCALE



ISOMETRIC VIEW



FRONT SIDE BOTTOM

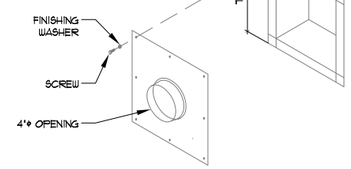
4 SURGE PROTECTOR/OVP DETAILS

NOT TO SCALE

INSTALLATION INSTRUCTIONS:
•OTHER MICROFLECT SEALANTS MAY BE USED SUCH AS B184 SEALING TAPE OR B202 DUCT SEAL DEPENDING ON THE APPLICATION.
•METAL, WOOD, PLASTIC: POSITION THE WAVEGUIDE ENTRY PLATE ON THE WALL, MAKING SURE THAT IT IS LEVELED AND MARK ALL THE HOLE LOCATIONS ON THE WALL.
CUT THE LARGE HOLES FIRST, THEN DRILL 5/16" HOLES 1-3/8" DEEP FOR THE MOUNTING SCREWS. FOR METAL OR PLASTIC WALLS, INSERT THE APPLIED SCREW ANCHORS INTO THE MOUNTING HOLES. ATTACH THE ENTRY PLATE WITH THE PROVIDED SCREWS AND FINISH WASHERS.
IF OTHER MOUNTING HARDWARE IS USED, IE. BOLTS AND NUTS, BE SURE TO USE THE PROVIDED FINISH WASHERS.
APPLY B195 ALUMILASTIC SEALANT OR EQUAL (NOT SUPPLIED) ALONG THE SIDES AND TOP OF THE WAVEGUIDE ENTRY PLATE. ALSO COVER THE MOUNTING SCREWS WITH SEALANT

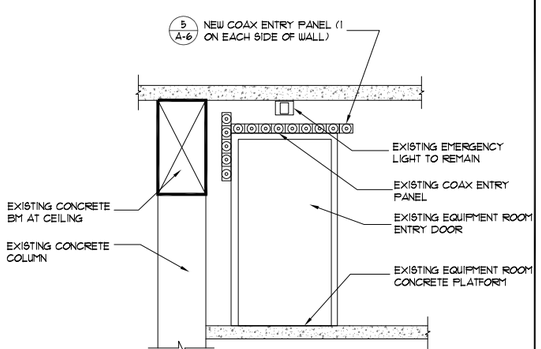
ENTRY PANEL WITH 1-3/8" EDGE DIST.

PRODUCT NUMBER	NUMBER OF PORTS	PORT LAYOUT	DIMENSIONS W	H	C	D	WALL OPENING
B1199	1	1x1	7"	7"	5.5"	4"	4"x4"



5 PORT WAVEGUIDE

NOT TO SCALE



6 PARTIAL EQUIPMENT ROOM ELEVATION

NOT TO SCALE

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GA	11/15/13	PRELIM PERMIT ISSUE

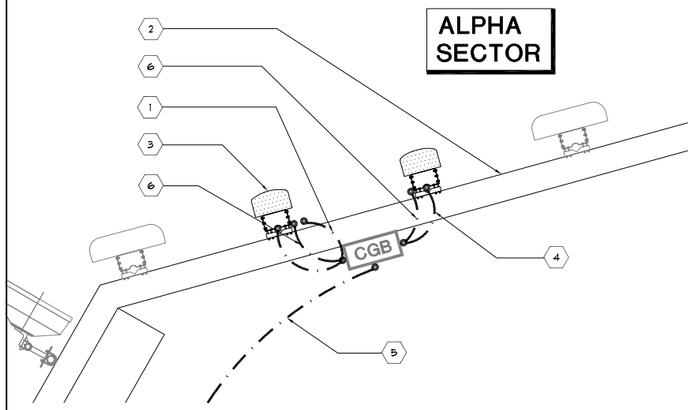
SHEET NAME

DETAILS

SHEET NUMBER

A-6

PROJECT NUMBER
20130995344

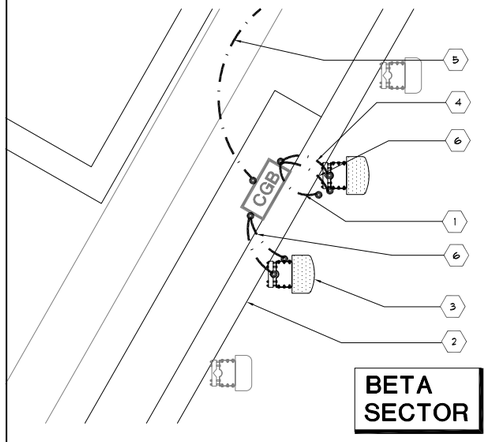


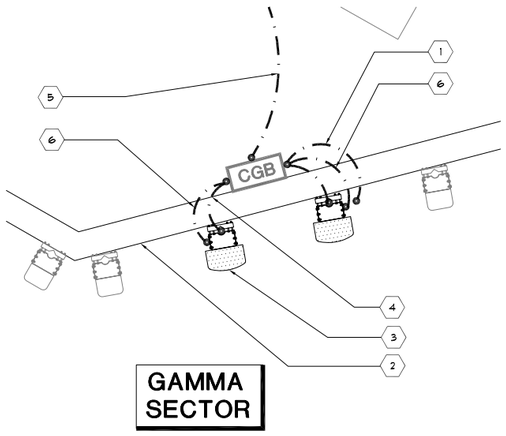
KEY NOTES:

1. SURGE PROTECTOR GROUNDING, #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR TO COLLECTION GROUND BAR AT ANTENNA LEVEL OF TOWER (SURGE PROTECTOR MOUNTED BELOW ANTENNA - NOT SHOWN FOR CLARITY)
2. EXISTING WALL OF PENTHOUSE
3. NEW VERIZON WIRELESS ANTENNAS.
4. ANTENNA GROUNDING, #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR TO COLLECTION GROUND BAR AT ANTENNA LEVEL OF TOWER
5. COLLECTION GROUND BAR FINAL GROUND LEAD, #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR TO MASTER GROUND BAR AT ROOF TOP DOG HOUSE
6. RRUS UNIT GROUNDING, #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR TO COLLECTION GROUND BAR (RRUS MOUNTED BELOW ANTENNA - NOT SHOWN FOR CLARITY)

1 GROUNDING PLANS AND NOTES

SCALE: 1/2" = 1'-0" (22x34), 1/4" = 1'-0" (11x17)





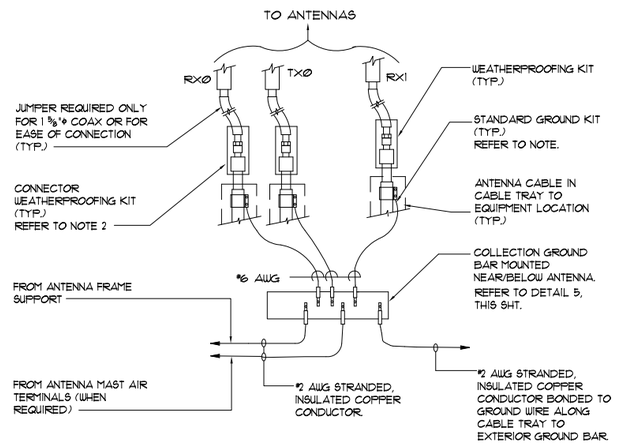
LEGEND	
ITEM	DESCRIPTION
⊗	5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD, MINIMUM 42" BELOW GRADE, AT MINIMUM 10'-0" O.C. (HARGER #5810).
– – –	#2 AWG TINNED SOLID BARE COPPER WIRE, MINIMUM 30" BELOW GRADE, OR 6" BELOW LOCAL FROST LINE
–•–	CADWELD CONNECTION

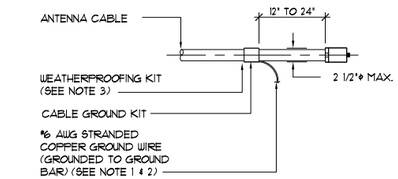
GENERAL NOTES:

1. ALL CADWELD CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COVERED WITH TWO (2) COATS OF SHERWIN WILLIAMS GALVANITE PAINT B35OW13 OR EQUAL.
2. ALL ELECTRICAL CADWELD AND MECHANICAL GROUND CONNECTIONS WILL HAVE NON-OXIDATION COMPOUND APPLIED TO CONNECTION.
3. ANY METAL OBJECTS WITHIN 6 FEET OF THE EXTERNAL GROUND RING SHALL BE GROUNDED.
4. ALL GROUNDING MATERIALS AND CADWELD MOLDS, SHOTS, ETC., SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR, UNLESS OTHERWISE NOTED.
5. THE ELECTRICAL CONTRACTOR SHALL FOLLOW GROUNDING SYSTEM INSTALLED AND TESTING PROCEDURES AS DESCRIBED IN THE GENERAL ELECTRICAL PROVISIONS.

2 GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION SPECIFICATIONS AND ALL APPLICABLE LOCAL CODES.
2. ALL GROUNDING SHALL CONFORM TO THE CURRENT VERIZON WIRELESS STANDARDS.
3. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
5. PREFABRICATED SHELTER WILL BE PROVIDED WITH INTERNAL WIRING AND EQUIPMENT INSTALLED. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO DRAWINGS PROVIDED BY SHELTER MANUFACTURER.
6. FOR INTERIOR EQUIPMENT LAYOUT AND LOCATION, SEE SHELTER MANUFACTURER'S DRAWINGS AND SPECIFICATION. IN CASE OF CONFLICT THE DRAWINGS GOVERN.
7. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
8. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING TWO (2) HIGH PRESS CRIMPS.
9. ALL EXOTHERMIC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.
10. ALL GROUNDING CONNECTORS TO BE CLEAN AND FREE OF PAINT AT THEIR MATING SURFACES AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
11. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG TIN PLATED COPPER UNLESS OTHERWISE INDICATED.
12. GROUND RODS SHALL BE STAINLESS STEEL OR COPPER CLAD STEEL, 5/8"Ø 10-FT. LONG, AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 18" BELOW FINAL GRADE OR 6" BELOW FROST LINE FOR MAXIMUM DEPTH.
13. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
14. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
15. GROUND RING SHALL BE LOCATED A MINIMUM OF 24" BELOW GRADE OR 6" MINIMUM BELOW THE FROST LINE.
16. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE PAD, SPREAD FOOTING, OR FENCE.
17. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
18. OBSERVE N.E.C. AND LOCAL UTILITY REQUIREMENTS FOR ELECTRICAL SERVICE GROUNDING
19. GROUNDING ATTACHMENT TO TOWER SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS OR AT GROUNDING POINTS PROVIDED (2 MINIMUM)
20. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS.
21. MINIMUM BENDING RADIUS FOR GROUNDING CONDUCTORS IS 8" WHEN BENDING IS NECESSARY. GROUND CONDUCTORS ARE TO BE AS STRAIGHT AS POSSIBLE.
22. NO SPLICES PERMITTED IN GROUND CONDUCTORS.
23. ENSURE ALL MECHANICAL CONNECTORS ARE TORQUED TO THE MANUFACTURER'S SPECIFIED VALUES.
24. GROUND BARS SHALL NOT BE FIELD MODIFIED.
25. ALL HORIZONTAL FENCE SECTIONS TO BE GROUNDED WITH 8' SINGLE BARREL GROUND STRAPS.
26. USE PANI SCHEME FOR LOADING ON MGB AS DISCUSSED IN NSTD 119, 33 & 36.





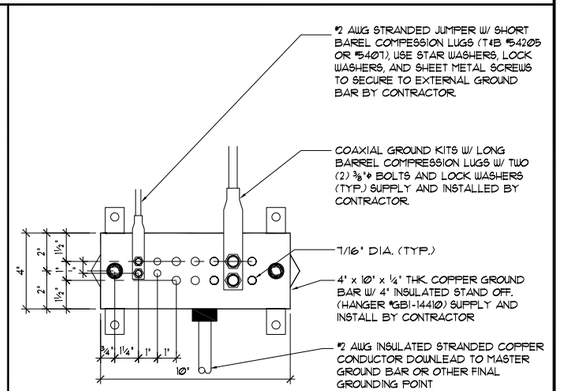
CONNECTION OF COAX CABLE GROUND KIT TO ANTENNA CABLE

NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE ANDREW SUREGROUND TYPE KIT WITH TWO-HOLE LUG.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

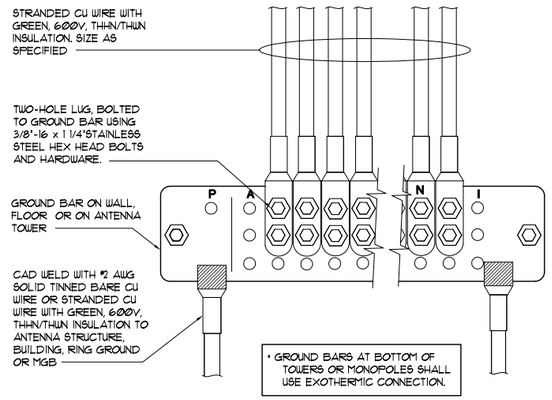
3 COAXIAL CABLE GROUND WIRE TO GROUND BAR CONNECTION

NOT TO SCALE



5 COLLECTION GROUND BAR

NOT TO SCALE



PANI SCHEME SPECIFICATIONS:

PRODUCER (P)
CONNECTS TO WIRELESS EQUIPMENT CABINETS, CABLE ENTRANCE GROUND BAR (CEGB), MAIN DISTRIBUTION FRAME GROUND BAR (MDFB), AND STANDBY ENGINE-GENERATOR SET FRAME AND OTHER NOISE PRODUCING EQUIPMENT

ABSORBER (A)
CONNECTS TO THE EARTH ELECTRODE SYSTEM INCLUDING CENTRAL OFFICE GROUND GRID, BUILDING STRUCTURAL GROUND, METALLIC WATER PIPE SYSTEM, ANTENNA SUPPORTING STRUCTURE GROUND SYSTEM, AND ELECTRICAL SERVICE ENTRANCE GROUND

NON-ISOLATED (N)
CONNECTS TO EQUIPMENT NOT IN AN ISOLATED GROUND ZONE (IGZ) SUCH AS CBN EQUIPMENT FRAME GROUNDS AND DC GROUND CONDUCTORS FOR DC POWER SYSTEMS THAT SERVE CBN OR BOTH CBN AND IBN EQUIPMENT

ISOLATED (I)
CONNECTS TO THE SINGLE POINT CONNECTION BAR (SPCB), FOR IBN EQUIPMENT

6 GROUND BAR CONNECTION DETAIL AND NOTES

NOT TO SCALE

verizon wireless

ODELIA PACIFIC CORPORATION

SEA - CARILLON POINT

(AWS)

3000 CARILLON POINT KIRKLAND, WA 98033

CAMP+ ASSOCIATES
19401 40TH AVE W, SUITE 200
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PROJECT MANAGER: EJC

PREPARED BY: GA

APPROVED BY: EJC

GA	12/27/13	FINAL PERMIT ISSUE
GA	12/20/13	FINAL PERMIT ISSUE
GA	12/19/13	PRELIM PERMIT ISSUE
GA	11/25/13	PRELIM PERMIT ISSUE
GA	11/8/13	PRELIM PERMIT ISSUE
GA	11/5/13	PRELIM PERMIT ISSUE

STATE OF WASHINGTON 40555 REGISTERED PROFESSIONAL ENGINEER

12/30/13

SHEET NAME

GROUNDING PLAN, DETAIL AND NOTES

SHEET NUMBER

E-1

PROJECT NUMBER

20130995344

CAMP+ ASSOCIATES

SEA - CARILLON POINT

3000 CARILLON POINT, KIRKLAND, WA 98033

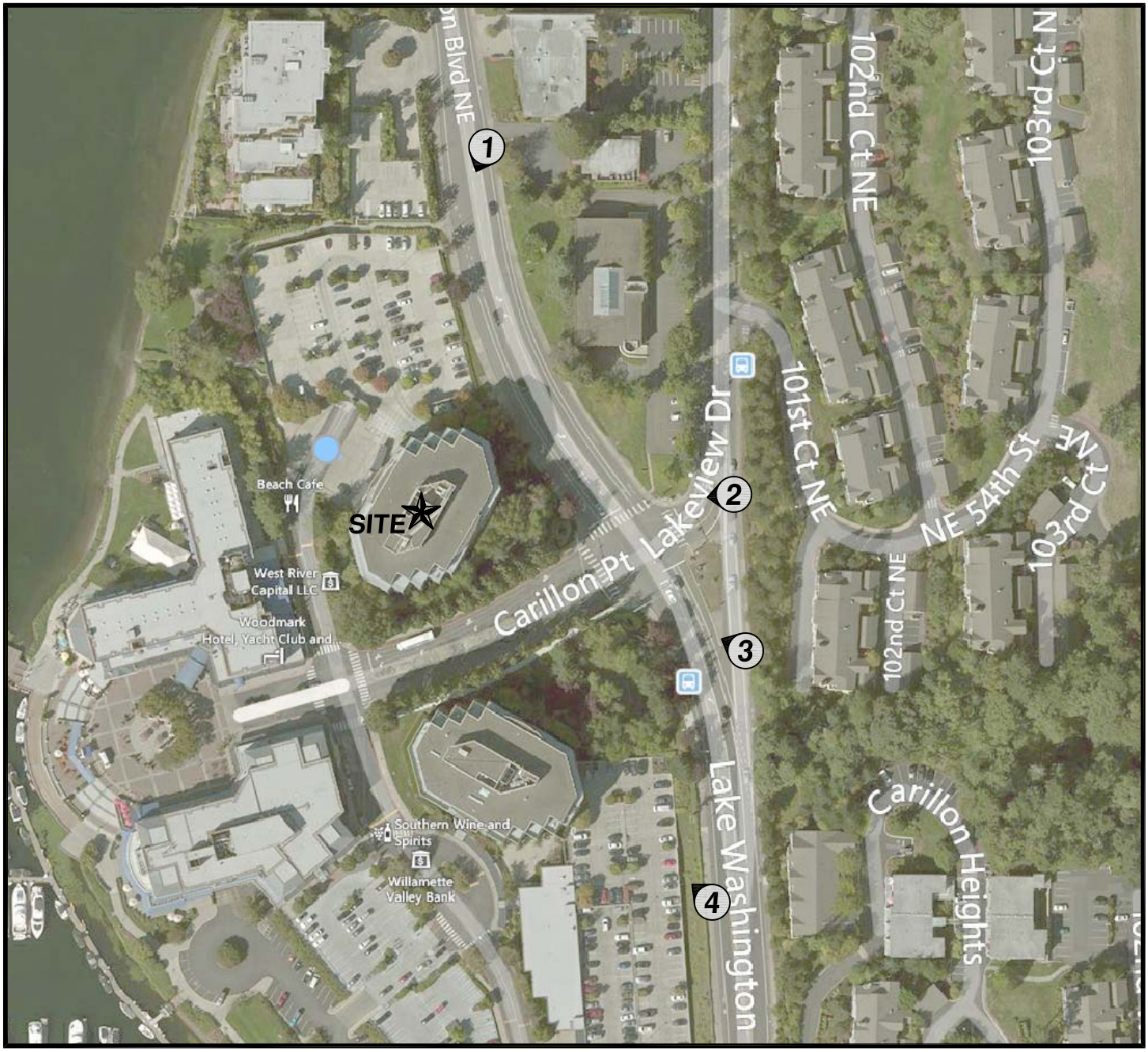

PHOTO SIM LOCATION MAP

CAMP+ ASSOCIATES

SEA - CARILLON POINT

3000 CARILLON POINT, KIRKLAND, WA 98033

VIEW #1 LOOKING SOUTHWEST

CURRENT

PROPOSED

CAMP+ ASSOCIATES

SEA - CARILLON POINT

3000 CARILLON POINT, KIRKLAND, WA 98033

VIEW #2 LOOKING WEST

CURRENT

PROPOSED

CAMP+ ASSOCIATES

SEA - CARILLON POINT

3000 CARILLON POINT, KIRKLAND, WA 98033

VIEW #3 LOOKING NORTHWEST

CURRENT

PROPOSED

CAMP+ ASSOCIATES

SEA - CARILLON POINT

3000 CARILLON POINT, KIRKLAND, WA 98033

VIEW #4 LOOKING NORTHWEST

CURRENT

PROPOSED

PROJECT DESCRIPTION

INTRODUCTION

Verizon Wireless (here after referred to as "Verizon") is a wireless telephone company operating throughout the United States of America. Verizon is licensed to operate in the United States by the Federal Communications Commission (FCC). Verizon is currently expanding its network in the King County area to make available improved telephone service and provide wireless capacity to its subscribers.

This proposal describes the scope of the proposed project by providing specific information regarding the project location, zoning, specifications, and required services.

It is Verizon's desire to work with the City of Kirkland to ensure that this project is consistent with local ordinances and zoning regulations while providing wireless coverage to Verizon's customers and provide critical communication services for emergency, business, and personal use.

Project Goals

The goal of the Verizon SEA Carillon Point site is to upgrade Verizon's existing network to provide better telephone service. Verizon intends to achieve these network goals consistent with all policies and ordinances of the City of Kirkland.

Application Request Plan

The applicant is requesting the following:

- Minor Modification

GENERAL PROJECT DESCRIPTION

Project Overview

The applicant, Verizon, proposes to modify an existing rooftop telecommunication facility located at 3000 Carillon Point (Parcel No. 1725059058) to provide expanded services.

The proposed modification consists of the following: Upgrading/replacing six (6) existing antennas and add associated ancillary equipment. Please see Sheet A-3 and A-5.1 for more detailed information.

Facility Specifications

- Antennas – Verizon is proposing replace/upgrade six (6) existing antennas. Please see Sheet A-3 and A-5.1 for more detailed information.

- Auxiliary Equipment – Verizon is proposing to attach the following auxiliary equipment behind the existing antennas on the tower: remote radio units (RRU) and surge protectors. Please see Sheet A-3 for additional information.

- Color – The antennas, any ancillary equipment, and any associated mounting hardware will be painted to match the existing site conditions.

- Facility Maintenance – The facility is generally serviced once a month. One (1) to two (2) employees are on site for an average of four (4) hours of maintenance checks. This check is typically for preventive maintenance purposes. In the event of a problem, a crew is dispatched to the site immediately.

GENERAL SITE ANALYSIS

Zoning General Plan Designation

The site is zoned PLA 15A. Verizon's proposed site modifications require the review and approval of a Minor Modification request according to Section 117.20 of the Kirkland Zoning Code (KZC).

Accordingly, Verizon is requesting the review and approval of a Minor Modification request, pursuant to the criteria found in KZC 117.105:

- The modification is minor and will not substantially change the PWSF; and
- There will not be any substantial changes in the impacts on the neighborhood or the City as a result of the change

Design Standards

According to KZC 117.65.1-3:

1. Context – The location and design of a cell site shall consider its visual and physical impact on the surrounding neighborhood and shall, to the extent feasible, reflect the context within which it is located.

The proposed modifications are located on the existing rooftop in order to reduce the visual and physical impact to the surrounding neighborhood.

2. Design Compatibility – PWSF shall be architecturally compatible with the surrounding buildings and land uses or otherwise integrated, through location, design, and/or concealment technology, to blend in with the existing characteristics of the site and streetscape to the maximum extent practical.

The proposed modifications have been designed to be compatible with the surrounding buildings and have been integrated as much as possible with the existing building

3. Concealment Technology – One or more of the following concealment measures must be employed unless the City determines through the applicable review process that alternative measures would be more appropriate given the contextual setting of the PWSF:

   a. For personal wireless service towers:

      If within an existing stand of trees, the tower shall be painted a dark color, and be made of wood or metal. A greenbelt easement is required to ensure permanent retention of the surrounding trees.

      Towers in a more open setting shall have a backdrop (for example, but not limited to, trees, a hillside, or a structure) on at least two sides, be a color compatible with the backdrop, be made of materials compatible with the backdrop, and provide architectural or landscape screening for the remaining sides. If existing trees are the backdrop, then a greenbelt easement is required to ensure permanent retention of the surrounding trees. The greenbelt easement shall be the minimum necessary to

provide screening and may be removed at the landowner's request in the event the facility is removed.

Antennas shall be integrated into the design of any tower to which they are attached. External projections from the tower shall be limited to the greatest extent technically feasible. Where antennas are completely enclosed within the tower, the need for the backdrop described in the preceding paragraph may be reduced or eliminated, depending on the tower design and context.

The proposed modifications are located on an existing building. The replacement antennas will be painted to match the existing building.

b. For rooftop antennas or antennas mounted on other structures:

Omni-directional antennas mounted on the roof shall be of a color compatible with the roof, structure or background.

Other antennas shall use compatible colors and architectural screening or other techniques approved by the City.

Antennas shall be integrated into the design of the structure to which they are attached. External projections from the structure shall be limited to the greatest extent technically feasible.

The proposed modifications are located on an existing building. The replacement antennas and auxiliary equipment will be painted to match the existing building.

c. Antennas mounted on one or more building facades shall:

(1) Use color and materials to provide architectural compatibility with the building;
(2) Be mounted on a wall of an existing building in a configuration as flush to the wall as technically possible; and
(3) Not project above the wall on which it is mounted.

The proposed modifications are located on an existing building. The replacement antennas and auxiliary equipment will be painted to match the existing building and are flush mounted. Please see Sheet A-5.1 for more detailed information.

d. Where feasible, cable and/or conduit shall be routed through the inside of any new tower, utility pole, or other support structure. Where this is not feasible, or where such routing would result in a structure of a substantially different design or substantially greater diameter than that of other similar structures in the vicinity or would otherwise appear out of context with its surroundings, the City may allow or require that the cable or conduit be placed on the outside of the structure. The outside cable or conduit shall be the color of the tower, utility pole, or other support structure, and the City may require that the cable be placed in conduit.

Any necessary cable and/or conduit will be routed to reduce visibility where feasible.

e. Alternative measures for concealment may be proposed by the applicant and approved by the City, if the City determines through

the applicable review process that the optional measures will be at least as effective in concealing the PWSF as the measures required above.

f. Notwithstanding the above, the manner of concealment for any PWSF that requires approval through Process IIA or Process IIB shall be reviewed and determined as part of that process.

Setbacks

According to KZC 117.65.4:

> Setbacks – The following regulations apply, except for structures located in public right-of-way:
>
> a. New towers in any zone shall be set back a minimum of 20 feet from any property line, plus an additional one-half foot for each foot of tower height above 40 feet (e.g., if the tower is 40 feet in height, the setback will be 20 feet from any property line; if the tower is 50 feet in height, the setback shall be 25 feet from any property line).
>
> b. Replacement structures intended to accommodate a PWSF shall be set back a distance equal to or greater than the setback of the original structure from any property line adjacent to or across the street from a residential use or residential zone; and the lesser of 10 feet or the distance of the original structure from any property line adjacent to or across the street from all other uses or zones.

The proposed modifications are located on an existing building. The above regulations are not applicable to the proposal.

Tower and Antenna Height

According to KZC 117.65.5:

> Tower and Antenna Height – The applicant shall demonstrate, to the satisfaction of the City, that the tower and antenna are the minimum height required to function satisfactorily. Personal wireless service towers shall not exceed 40 feet in residential zones, as measured from the average building elevation at the tower base to the highest point of the tower, antenna, or other physical feature attached to or supported by the tower. Examples of information that can be used to demonstrate that the tower and antennas are the minimum height necessary include, but are not limited to, propagation maps showing the necessity of the height to provide the required coverage, and a letter from a radio frequency engineer stating and explaining the necessity of the proposed height.

The proposed antenna modifications will not have any projections above the existing building height. The proposed antenna height will match existing antenna heights on the building.

Antennas on a Utility Pole

According to KZC 117.65.6:

> Antennas on a Utility Pole – Antennas mounted to an existing or replacement utility pole shall be subject to the following height limits:

a. In any zone, 15 feet above the top of a pole not used to convey electrical service;
b. In a residential zone, 15 feet above the electrical distribution or transmission conductor (as opposed to top of pole) if the pole is used to convey electrical service; and
c. In a nonresidential zone, 15 feet above an electrical distribution conductor or 21 feet above an electrical transmission conductor (as opposed to top of pole) if the pole is used to convey electrical service.
d. On Seattle City Light transmission towers, regardless of zone, 15 feet above the top of the tower, before any tower extensions, subject to the concealment measures identified in subsection (3) of this section.

The proposed modifications are located on an existing building. The above regulations are not applicable to the proposal.

Antennas on a Building, Mechanical Equipment Enclosure, or Water Reservoir

According to KZC 117.65.7:

Antennas on a Building, Mechanical Equipment Enclosure, or Water Reservoir

a. Antennas, including panel or directional antennas, may be attached to the sides, parapets, mechanical penthouses, or similar elements, of buildings, subject to the limitations of this chapter.
b. Antenna height is measured above the top of the roof, not from the parapet or from the average building elevation of the building, mechanical equipment enclosure, or water reservoir.
c. Omni-directional antennas may be roof-mounted, but may not be mounted on top of rooftop appurtenances. No panel or directional antennas may be mounted on roofs or project above the roofline, except as provided in subsection (7)(g) of this section. The "roofline" of a water reservoir that incorporates a curved roof shall be the point at which the vertical wall of the water reservoir ends and the curvature of the roof begins.
d. Whip antennas may exceed the structure height by 15 feet, and other omni-directional antennas may exceed the structure height by 10 feet.
e. Roof-mounted antennas must be set back from the edge of the roof a distance equal to 100 percent of antenna height.
f. Roof-mounted antennas shall be consolidated and centered in the roof to the maximum extent feasible rather than scattered.
g. Antennas, including flush-mounted panel or directional antennas, may be attached to an existing conforming mechanical equipment enclosure or stair or elevator penthouse or similar rooftop appurtenance which projects above the roof of the building, but may not project any higher than the enclosure.
h. Except for PWSF installed in an existing rooftop penthouse, PWSF shall occupy no more than 10 percent of the total roof area of a building. Rooftop conduit shall be excluded from this calculation.
i. Building parapets or other architectural features, including rooftop mechanical equipment enclosures, stair or elevator penthouses, or similar rooftop appurtenances, shall not be increased in size or height solely for the purpose of facilitating the attachment of PWSF components.

The proposed modifications are located on an existing building. The replacement antennas and auxiliary equipment will be painted to match the existing building and are flush mounted. There are no proposed changes in antenna height. The antennas are setback from the edge of roof the

required distance. The proposed site modifications meet the above requirements. Please see Sheet A-2 and A-5.1 for more detailed information.

Historic or Landmark Locations

According to KZC 117.65.8:

> Historic or Landmark Locations – No antennas shall be permitted on property designated as a historic resource or community landmark as identified in the Comprehensive Plan, unless such antennas have been approved in accordance with design requirements pertaining to historic structures.

Verizon and its agents are not aware of the property being designated as a historic resource and/or a community landmark.

Signals, Wires, Views, Lights, Signs, and Noise

According to KZC 117.65.9-13:

> 9. Signal Interference – No antennas shall cause localized interference with the transmission or reception of any other communications signals including, but not limited to, public safety signals, and television and radio broadcast signals.

Verizon's site will adhere to all FCC regulations and licenses.

> 10. Support Wires – No guy or other support wires shall be used in connection with antennas, antenna arrays or support structures except when required by construction codes adopted by the City.

Verizon's site will not utilize any support wires.

> 11. Views – PWSF, including towers, must be located and oriented in such a way as to minimize view blockage.

Verizon's proposed site modifications will not impact any views.

> 12. Lights, Signals and Signs – No signals, lights or signs shall be permitted on towers unless required by the FCC or the FAA.

No lights signals, and/or signs will be on-site unless required by either the FCC and/or Federal Aviation Administration (FAA).

> 13. Noise – The installation and operation of PWSF shall comply with the noise standards set forth in KZC 115.95.

Verizon's site will adhere to all applicable local and state regulations regarding noise.

Federal Requirements

According to KZC 117.65.14

> Federal Requirements – All PWSF must meet current standards and regulations of the FAA, the FCC and any other agency of the federal government with the

authority to regulate towers and antennas. If such standards and regulations are changed, the owners of the PWSF shall bring such PWSF into compliance with such changes in accordance with the compliance deadlines and requirements of such changes. Failure to bring towers and antennas into compliance shall constitute grounds for the removal of the tower or antenna at the owner's expense. If, upon inspection, the City concludes that a PWSF fails to comply with such regulations and standards and constitutes a danger to persons or property, then, upon notice being provided to the owner of the PWSF, the owner shall have 30 days to bring such PWSF into compliance with such standards and regulations. If the owner fails to bring such PWSF into compliance within said 30 days, the City may remove such PWSF at the owner's expense.

Verizon proposed telecommunication facility will meet or exceed current standards and regulations of the FAA, the FCC, and any other agency of the Federal government with the authority to regulate towers and antennas.

Verizon's site will conform to all FAA/FCC regulations, and because the maximum ERP is less than two thousand (2,000) watts and/or the height of the facility is greater than ten meters (10m), an environmental evaluation of radio frequency emissions is exempted per CFR Title 47 Part 24, Subpart E.

Verizon has a license from the FCC to provide wireless telecommunication services throughout Washington State

Equipment Structure Standards

According to KZC 117.70:

1. Maximum Size in Residential Zones – Equipment structures shall not exceed five feet in height. Equipment structure enclosures shall not exceed 125 square feet each. These limitations shall apply to each individual equipment structure and enclosure; provided, that equipment structures that are fully contained within a legally established building that houses or is accessory to a principal permitted use shall not be subject to these limitations.
2. Maximum Size in Nonresidential Zones – Gross floor area of equipment structures shall be the minimum necessary but not greater than 240 square feet per provider. Maximum height is 10 feet above average building elevation. These limitations shall not apply to equipment structures that are fully contained within a building that houses or is accessory to a principal permitted use and that satisfies the dimensional regulations of the underlying zone.
3. Equipment Structures Located in Right-of-Way
    a. If ground-mounted, equipment structures shall not exceed a height of 30 inches. If mounted on poles, said structures shall comply with subsection (6) of this section. Setback requirements do not apply to equipment structures located in the right-of-way.
    b. Exception – The Planning Official may increase the 30-inch height limitation for ground-mounted equipment structures to a maximum of 66 inches, if:
        1) The height increase is required by the serving electrical utility; and
        2) No feasible alternative exists for reducing the height of the structure; and
        3) Concealment measures are employed; and

4) The height increase will not adversely impact the neighborhood or the City.

4. Setbacks When Located on Private Property – Ground-mounted equipment structures over 30 inches in height shall be set back at least 10 feet from all property lines; provided, that equipment structures that are fully contained within a legally established building that houses or is accessory to a principal permitted use shall not be subject to this requirement.
5. Equipment Structures on or Above a Structure – Equipment structures on or above a structure shall be subject to the following criteria:
   a. Equipment structure height is measured above the top of the roof, not the parapet.
   b. When mounted to the roof of a building with a pitched or stepped roof form, roof-mounted equipment structures shall be incorporated into the stepped roof form, and not appear as a separate penthouse or box.
6. Equipment Structures Mounted on Poles or Towers
   a. Equipment structures may be mounted on utility poles or towers. The location and vertical clearance of such structures shall be reviewed by the Public Works Department and verified by the underlying utility owner to ensure that the structures will not pose a hazard to other users of the right-of-way.
   b. Equipment structures mounted on utility poles or towers shall be located in a manner that minimizes clutter and visual impact.
7. Compatibility – Equipment structures shall be designed to be compatible with the surrounding area in which they are located. For example, in a residential area, a sloped roof or wood siding may be required.
8. Concealment – One or more of the following concealment measures must be employed unless the City determines through the applicable review process that alternative measures would be more appropriate given the contextual setting of the equipment structure:
   a. Locating within a building or building appendage constructed in accordance with all applicable City codes;
   b. Locating on top of a building, with architecturally compatible screening;
   c. Locating underground;
   d. Locating above ground with a solid fence and landscaping subject to the limitations of KZC 117.75(3); or
   e. If mounted on a utility pole or tower, the equipment structure shall be of a similar color to that of the pole or tower to which it is attached, unless alternative measures are approved by the City as part of the applicable review process.
9. Noise Standards – Equipment structures shall be oriented so that exhaust ports or outlets are pointed away from properties that may be impacted by noise. The installation and operation of equipment structures shall comply with noise regulations in KZC 115.95. The City may require an assessment of noise after operation begins and remediation if the noise levels created are not within the prescribed limits. Cumulative noise impacts will be measured in cases where there is more than one equipment structure.

Verizon's proposed site modifications do not include additional ground mounted equipment cabinets.

Screening

According to KZC 117.75:

1. General – Landscaping shall be required to screen as much of the PWSF and any ground-mounted features, including fencing, as possible, and in general

soften the appearance of the site. The City may allow or require the use of concealment technology, as described in KZC 117.65(3), either instead of or in addition to required landscaping, to achieve effective screening. The effectiveness of visual mitigation techniques will be evaluated by the City, taking into consideration the site as built. If the antenna is mounted on a building, and the equipment structure is housed inside the building, landscaping shall not be required.

2. Existing Vegetation – Existing vegetation shall be preserved or improved, and disturbance of the existing topography of the site shall be minimized, unless such disturbance will result in less visual impact of the site on the surrounding area.
3. Buffering
    a. Except for PWSF located in a public right-of-way and subject to review as a Planning Official decision, buffering of ground-mounted PWSF shall be required around the perimeter of the facility as follows:
        1) Provide a five-foot-wide landscaped strip with one row of trees planted no more than 10 feet apart on center along the entire length of the buffer, with deciduous trees of two-inch caliper, minimum, and/or coniferous trees at least six feet in height, minimum. At least 50 percent of the required trees shall be evergreen.
        2) Living ground covers planted from either four-inch pots with 12-inch spacing or one-gallon pots with 18-inch spacing to cover within two years 60 percent of the land use buffer not needed for viability of the trees.
    b. As an option to the buffering measures described in subsection (3)(a) of this section, the City may approve or require one or more of the measures provided for below, if the City determines that such measures will provide effective screening. Such optional measures include, but are not limited to, the following:
        1) Walls or solid fencing, of a height at least as high as the equipment it screens, subject to subsection (4) of this section, Fencing.
        2) Architectural features, such as parapets, mechanical penthouses, or building fin walls.
        3) Climbing vegetation supported by a structure such as a fence or trellis, of a type and size that will provide a dense visual barrier at least as high as the equipment it screens within two years from the time of planting.
        4) Screening by the natural topography of the site or the adjoining property or right-of-way.
4. Fencing – Fencing may be allowed or required if it is needed for security purposes, or if it is part of concealment technology. The use of chain link, plastic, vinyl or wire fencing is prohibited unless it is fully screened from public view. Landscaping shall be installed on the outside of fences. Fencing installed specifically for the purpose of screening ground-mounted PWSF shall not be taller than necessary to provide appropriate screening.
5. Maintenance – The applicant shall maintain the screening in good condition and shall replace any plants required by this chapter or approved or required as part of the permit approval that are unhealthy or dead. In the event that screening is not maintained at the required level, the City, after giving 30 days' advance written notice to the provider, may maintain or establish the screening and bill both the landowner and provider for such costs until such costs are paid in full.
6. Notwithstanding the above, the manner of screening for any PWSF that requires approval through Process IIA or Process IIB shall be reviewed and determined as part of that process.

Verizon's proposed site modifications do not include additional ground mounted equipment and/or any changes to the existing equipment area.

State Environmental Policy Act (SEPA)

According to Revised Code of Washington (RCW) 43.21C.0384:

> Application of RCW 43.21C.030(2)(c) to personal wireless services facilities.
>
> (1) Decisions pertaining to applications to site wireless service facilities are not subject to the requirements of RCW 43.21C.030(2)(c), if those facilities meet the following requirements:
>
> (a) The collocation of new equipment, removal of equipment, or replacement of existing equipment on existing or replacement structures does not substantially change the physical dimensions of such structures; or
>
> (b) The siting project involves constructing a personal wireless service tower less than sixty feet in height that is located in a commercial, industrial, manufacturing, forest, or agricultural zone. This exemption does not apply to projects within a designated critical area.
>
> (2) The exemption authorized under subsection (1) of this section may only be applied to a project consisting of a series of actions when all actions in the series are categorically exempt and the actions together do not have a probable significant adverse environmental impact.
>
> (3) The department of ecology shall adopt rules to create a categorical exemption for wireless service facilities that meet the conditions set forth in subsections (1) and (2) of this section.
>
> (4) By January 1, 2020, all wireless service providers granted an exemption to RCW 43.21c.030 (2) © must provide the legislature with the number of permits issued pertaining to wireless service facilities, the number of exemptions granted under this section, and the total dollar investment in wireless service facilities between July 1, 2013 and June 30, 2019.
>
> (5) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.
>
> (a) "Wireless services" means wireless data and telecommunications services, including mobile services, commercial mobile data services, unlicensed wireless services, and common carrier wireless exchange access services, as defined by federal laws and regulations.
>
> (b) "Wireless service facilities" means facilities for the provision of wireless services.
>
> (c) "Collocation" means the mounting or installation of equipment on an existing tower, building, or structure for the purpose of either transmitting or receiving, or both radio frequency signals for communications purposes.
>
> (d) "Existing structure" means any existing tower, pole, building, or other structure capable of supporting wireless service facilities.
>
> (e) "Substantially change the physical dimensions" means:

(i) The mounting of equipment on a structure that would increase the height of the structure by more than ten percent, or twenty feet, whichever is greater; or

(ii) The mounting of equipment that would involve adding an appurtenance to the body of the structure that would protrude from the edge of the structure more than twenty feet, or more than the width of the structure at the level of the appurtenance, whichever is greater.

The proposed attachment modifications (collocation) to an existing building meet the requirements for being categorically exempt from SEPA review.

Parking

A parking space has been provided for maintenance.

FCC Time Period Guidelines

On November 18, 2009, the FCC issued a Declaratory Ruling (FCC-09-99A1) that created periods of time under the Telecommunications Act (TCA) in which zoning authorities must act upon siting applications filed by wireless carriers or be in violation of the TCA. Specifically, the timelines are as follows: ninety (90) days for co-locations and one hundred fifty (150) days for all other sites including new towers. Please see the FCC Declaratory Ruling 09-99A1 for more detailed information.

Existing Use

The property has existing telecommunication facilities.

Access/Circulation

There are no traffic impacts associated with these types of facilities as they are unmanned and require infrequent maintenance. The existing access road will be used for the proposal.